

Brown "rhum" bottle, twenty inches high; high-shouldered green bottle, thirteen inches high, used for "simples"

# Candle Days

The story of early American arts and implements

by
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THE CENTURY CO.

New York

London

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First Printing September, 1927

#### T O

#### GEORGE AND LIZZIE MAYO

and those other old friends who have shared the memories of their beloved Candle Days, this book is lovingly dedicated

#### INTRODUCTION

For several years it has been my happy lot to be thrown among elderly people, whose younger days were lived during the candle-burning era. Their memories have turned often and lovingly to their younger years and, from their talk, I have been able to make rather extensive notes regarding the lives they lived, the industries in which their parents and grandparents were interested and active, and also regarding things which, though seemingly unimportant in themselves, still shed a strong light on the old days and ways.

Since the greatest happiness lies, for elderly people, in giving the details of times which have passed, but are still dear, I have in many instances been able to take down word-for-word descriptions of such activities as candle-making, cheese-making, spinning, weaving, and others. There have been many detailed descriptions of farm work and the tools used; days spent in the sugar orchards; nights spent making charcoal; and of many industries which are no longer remembered, except by the old folks.

While all these things have been written about, at one time or another, I have tried to put into these chapters something a little more personal than is usually found, with especial care for those exact details, terms and expressions, which will be lost to us forever, when the last of these candle-burning folk have gone.

I have been fortunate, also, in being able to collect rather largely the old implements, with which the older generations worked, and have studied them and their uses with the people who remember how they used them, or how their grandparents used them. Many of the old industries I have taken part in myself, through the tender mercies of these older friends, so that I might be able to pass on, at least to my own children, the hand skill and crafts of our forebears.

Ingenuity and resourcefulness were the great assets of the older generations, attributes which speak loudly to us to-day from the implements which have been preserved to us from the old days. If we do not observe these qualities in our much prized "antiques," we have permitted much of their value to escape us.

A hollowed corn-mortar calls up a picture of the man who shaved it, the hand-wrought tools which he used for the hollowing, and the long low kitchen in which he bent to his task, night after night, by the chimney place. An old iron peel brings a well-shaded blacksmith shop to mind, as well as the brick oven in which it finally found its usefulness; while a bed quilt "colored blue" cannot well be separated in imagination from the hum of the spinning-wheel, where it first took form, or the indigo dye-pot, where it acquired its brilliant hue.

Lovely as the finished article may be, the homely thought, ingenuity and art, which went into its making, have always had for me the larger appeal; the thing itself is only one, the equally interesting means for its production, are many times one.

Women are still "coloring blue," before knitting their yarn into socks and mittens; and still raising their bread with potato yeast, which has stood on the kitchen shelf for more than seventy years; men are still going about the spring sugaring in the good old way, using hand-whittled shoulder-yokes for carrying the sap-pails; and threshing their grains with flails. Indeed many of those customs which the city dweller regards as belonging to the dim past, still persist in the country districts. This is something not generally realized.

It is from actual observation of many of these old customs which still exist, and from word-of-mouth description of many others, by those who have participated in them in the past, that the contents of these chapters have been gathered. Memories reaching back ninety years are clearest for earliest happenings; and candles are redipped with loving touch and horses re-shod with patient grace, when memory paints the picture.

M. N. R.

East Alstead, N. H. September 1927.

#### ACKNOWLEDGMENT

The author wishes to thank the publishers of House Beautiful for permission to reprint Chapters VII and VIII, which appeared in their magazine in 1926; and also to acknowledge her indebtedness to those writers of earlier days who through their letters, diaries and careful records have made it possible to unearth supplementary material.

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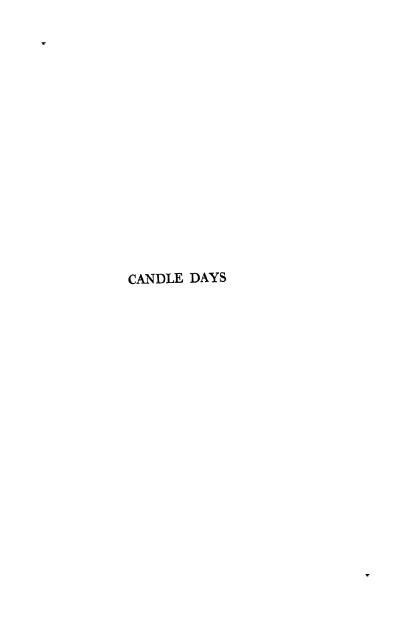
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#### I: The Cradle of the Horseshoe

STILL, under the spreading trees of some of our villages, the village smithy stands; but those villages are so far apart, and the sound of the sledge hammer on the anvil is heard by so few people, that the blacksmith shop can no longer be called one of our institutions. Sought for his skill, in the old days, by the menfolk of the entire countryside, respected for his good "horse" sense in matters practical, the smith was as much the host of the village as the storekeeper at the cross-roads, or the proprietor of the village tavern.

Before the coming of the automobile there were blacksmith shops every three or four miles throughout the countryside, but to-day we find them averaging a distance of at least ten miles apart; the old smiths are either dead, or become too old to shoe the heavier horses, while the young men are passing by this honorable trade, not only because it will never make them rich, but because there is easier work to do in other trades.

It was not poetic fancy which urged the poet to picture the village smithy beneath some spreading tree, but the sober and happy fact that, since he did much of his work in the open air, a lusty, nearby tree was necessary to the blacksmith, both for the blessing of its shade in summer heat, and as a prop for the numerous old wheels, abandoned tires and other appurtenances, which always spring from the ground at the call of the anvil.

Said a splendid specimen of old-school blacksmithing, not long ago, transferring some axle

grease from his hands to his cloven apron:

"Yes, I cal'late we do gather some c'lateral

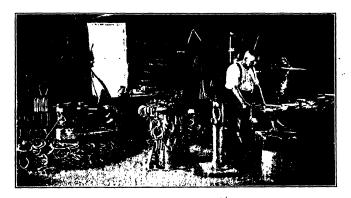
Deplored "collateral" the usual accumulation is, where the neighbors have crowded in too closely, but in itself adding much to the picture, when the wayfarer comes suddenly upon one of these old shops on the open road, its hospitable doors surrounded with vine-wound relics of passed usefulness.

If such a shop be in New England, there will be at one side of the door a granite post with an iron ring for waiting horses, and on the other side another granite post with a larger iron ring and a chain, for waiting oxen; and it is easy to realize, the fact that the power of the latter ring was twenty times greater than that of the former, each having been wrought in proportion to the strength of those guests, who would use them day after day through the long years.

To the modern person, horseshoeing is the sole reason for the blacksmith and his shop; and yet, had we been able to look in on the blacksmith of the earlier days, we would have seen a stalwart







THE TRADE OF HIS FATHERS
Anvil; leather bellows; the blacksmith at work

man, working not only at the shoeing of horses and the "ironing of wheels," but quite as busily bringing into form an incalculable number of articles, necessary for the comfort of the home itself. Many farms had their own forges where the simpler implements were hammered into shape, but the village blacksmith was seldom wanting, and it is with him and his two-fold industry that we are dealing.

Before either horseshoeing, or wrought-iron utensils could be produced, the old-fashioned blacksmith had to create his entire creating-out-fit. Molded in hand-made molds, his home-made bricks went into the building of his forge. The bellows, a great wood and cowhide lung, was fastened either overhead, or at the back of the forge; and when the blacksmith raised and low-ered the long, breast-high, wooden handle, its six or eight feet of wind power breathed like a human thing. The anvil, dainty mate of the cumbersome forge, was also wrought into its perfection by the blacksmith himself, while numberless tools of an infinite variety of shapes, were forged by the same hand.

Before the bellows could breathe life into the forge, for the making of this complete equipment, fuel had to be made and this also the blacksmith accomplished. The producing of "coal" in the earlier days was a distinct part of the blacksmithing trade; and one old man who remembers coal-

pits on a hill, not far from his boyhood home, tells us most exactly what this process was. First, however, we must remember that "coal," as we find it referred to in the old days, was really charcoal; and even to-day, when the parlor of some old farmhouse is to be heated for company, the housewife brings "coals" from the wood fire in the kitchen to start the "Franklin," or the "air-tight," or the "soap-stone." Again we must remember that a coal-pit of the past was a very different place from the coal-pits of to-day, and this is shown in the following description.

"When I was a boy and going to No. 8 school—it used to stand up in Eb's pasture—I always loved to slip away after school and go up on Macy's Hill and watch Hilkiah Sawyer at his coal-pit, when that time came 'round. He went up once a year and took his food along and a cover to sleep under and did not come down un-

til the fire was out.

"He did not like us boys to come snooping round, so I'd slip up in the early dusk and lay me down a little back of the opening, where he could not see me. I loved to catch a glimpse of the smouldering coals, when he'd open the sod; it looked different from other fire, kind of eerie and strange.

"You see charcoal made a hotter fire than wood, and the fire on the forge had to be hot. First of all Hilkiah would dig away a lot of sod,

then he'd set the wood up on end like an Indian's tepee, with a hole in the center for a draught; short pieces there were at first, only two or three feet, but getting longer for the outside of the stack, as it grew bigger.

"When the stack was done, it was high as Hilkiah himself and about twelve feet across the base. Then he built his fire right under the little stack in the middle and it would smoulder for three or four days. With the sod he had dug up first, he would cover the whole stack; and this and the dirt he used kept the fire from breaking out into a blaze. Poor old fellow, he got almighty tired of watching that fire, before those days were done with, for he had to watch night and day, that the air did not get through the covering and send his whole stack up in flames. The slow heat charred the whole stack, you see. I forgot to say that, right in the front, he left a little opening to see through, so he could tend the fire. It was that hole that I liked to peep into.

"No, the wood did not have to be very big, even those pieces on the outside were not a foot through. Some made their pits long and narrow and boarded up the sides, but Hilkiah did not,

and I liked his good old way the best."

Equipped now with all the needful materials, the colonial blacksmith was ready to throw open his doors; and in many cases the doors flung open by him were kept open by his son and his grandson after him, for a well-seasoned blacksmith shop along any highway was an establishment not to be lightly abandoned. Then, as now, when one is fortunate enough to find one of these old shops, the hospitable chair was waiting by the door; the tools were hanging in order for the next job of shoeing; the pile of old horseshoes in one corner was complemented by rows of new ones in another corner; the parings and broken nails were swept from the floor; and, standing by the forge, perhaps, with one hand on the great old bellows handle, the blacksmith was ready with his honest greeting.

One by one the Dobbins of the countryside found their way to this "iron nurse of early days," had their feet pared and cut into shape, stood patiently while the blacksmith hammered on the new hand-wrought shoes with hand-wrought nails, then trotted down the country road again toward home. And their masters only a couple of shillings the poorer for the job! When one knows that in 1815 "the hired horseshoers received ninety cents a day and found themselves, or forty-five cents a day with board and lodging," it is not surprising that shoes and labor did not cost the farmer over much. Even so late as 1872, a bill for shoeing was only sixty cents.

One of the most interesting parts of the old blacksmith shops was the "ox cage," or "ox

sling." This was a heavy oaken frame, fastened by hooks to the ceiling and then through great logs lying along the loft floor. So great is the body of the ox, that when the support of even one foot is taken away, the body is insufficiently supported, or strained, in the effort; and so the animal is swung up in a broad leather harness passed beneath the belly, the head fastened by a cable to a beam in front, the cable joining a heavy leather ring passed about the horns. Up through an opening in the ceiling, one may catch a glimpse of a huge wooden wheel, made with the careful art of the joiner; and when the blacksmith sees that the animal is ready to be swung, he will turn the wooden crank with its thick inch rope, winding over the sturdy wooden roller, and the wheel will begin to revolve. When the animal is thus carefully suspended, its feet are bound to the low side posts, and the work of shoeing begins.

As these animals are cloven-footed, they wear a pair of shoes on each foot; and the art of the old smiths is shown in the occasional hand-made ox-shoes which are still found here and there. Crude they may be, with their two, or even three, cross-bars, that their wearer might be "sharp shod," but they are infinitely more interesting than the machine-made shoes of to-day.

Even in New England, where one still sees ox teams swaying along the dusty roads, showing that there is yet need of ox slings, these are rarely found. Forty, sixty, eighty miles sometimes lie between them.

Up where the Green Mountains and the White Mountains jealously claim the same sun-basking lands, which lie between their long shadows, there is a tiny blacksmith shop. Before it stand two granite posts, one for the oxen, one for the Dobbins; and fastened above the open door there are two beautifully wrought horseshoes, the smaller showing between the points of the larger. These grow dull, or glow brightly, as the sun slips all day long through the branches of a spreading maple. Three generations of one family have here wielded the heavy sledge and struck sparks at the dainty anvil, and many are the dreamy hours which are spent in reminiscence of the years that have passed over this low roof.

A voice breaks the quiet flow of talk.

"Gee, Blossom, gee! Take it easy, little one. Easy now, easy, ea-sy!" And the face of Jared Higbee, a neighboring farmer, is thrust into the door of the shop.

"Hello, Mr. Potts, room for Blossom this

morning?"

"Morning, Jared. I cal'late we can accommodate. Fetch the old fella 'round to the end door." The blacksmith rises slowly from his ladder-back armchair, for many winters have beaten against him.

When the great black-and-white Blossom has been inveigled into stepping up the wooden runway to the cage, has been cabled and roped and strapped into place, Jared is standing close by his head.

"So, so, so!" he murmurs into the great furry ear; and while old Potts yanks the worn shoes off and fits the new shoes on, Jared is staunchly at his post, with his "so, so, so," interpolated into the love-words which this farmer lavishly bestows upon his great swaying pet. Surely he would give his life for this friend in whom his affections are centered.

Old Potts is bent low with a ridiculously small foot held firmly between his knees. "As I was saying, afore Jared and Blossom, here, come along, them little shoes I showed yer was made over sixty years ago, when I was eighteen year old. Squire Winslow's little cerriage horse paddled bad and I had to line her shoes with extra iron on the outside edge. Sho, now, Blossom, be still there, will yer? You're dretful lifey this morning." Blossom's merest shiver had started all the chains and cables rattling, and the log overhead groaned, as the great beast tried to shake off her arch enemy, a blue-bottle fly.

"So, so, s-oo, s-oo, little gal"—his love, therefore a "gal"—"nothing's going to hurt yer. Don't yer see your Jared right here, clost up?"

"And those little shoes for the speed horses,"

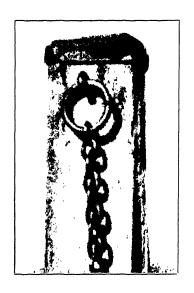
old Potts continues, "there's only one pair left. There used to be four sets in the closet yender, but somebody must have found them—they're gone. Pretty slender they be, made them as light as I could; don't want weight on a speed horse, you know. Back feet want to be a little lighter. Sho, now, Blossom, stand still, can't yer?" ("So, so, so," softly, from Jared.) "I braised those raised edges on with copper and the whole set weighed fourteen ounces. There, Jared, let's take the old fella down out of this. That blue-bottle won't give her no rest."

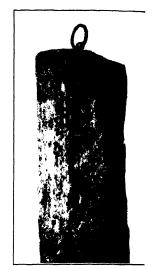
"Easy now, Blossom, easy, gal. 'Tain't a thing

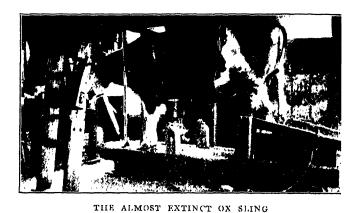
a'going to hurt you."

When ship building was undertaken in this country, the necessary iron had to be imported, but iron for the simpler needs was soon discovered close at hand. Iron ore was found in bogs, ponds and those strips of meadow lands which were called "sledges"; and, largely with the aid of the crude tools which they made for themselves, the blacksmiths of the sixteenth and seventeenth centuries wrought iron implements of a strength which has outlasted the years. Also, this old iron seems to have contained some quality which defied rust much better than the modern product.

One of these iron products was the handwrought nail. Early in the eighteenth century a mill was erected in Massachusetts which was called a "rolling and slitting mill." Here bar iron







Granite hitching-posts for oxen and horses respectively; ox supported by sling during shoeing

was rolled into ribbon iron, and then slit into rods, and it was these rods which the farmers carried home for their nail supply. Came a rainy day when work out of doors was impossible-then the slender rods were heated at the home forge and hammered into crude nails, the heads pounded into many and wonderful shapes, and the tips sharpened, sometimes almost to a needle point. Some of these nails were formed with a head on only one side and these were driven into the rockmaples at sugaring time, and upon them were hung the wooden sap buckets. As for horseshoe nails, they were the first to be made by machinery; and yet it is only within the last fifty years, that the blacksmith has been able to buy them ready pointed for use. One old blacksmith tells how he had little left to fill his "restin' time," when nails no longer needed pointing. The word "nail," in its widest sense, lingers tenaciously in some New England country districts, ordinary carpet tacks still being called "tack nails."

There is no more delightful pastime than the study of the hand-wrought products of these old blacksmith shops. Both in the villages and on the farms, numberless needs developed which could be met only through the use of iron utensils and implements, fashioned at the forge. One of the first needs was for pothooks, from which to hang the old brass and iron kettles and pots in the open fire places, and these were made in the S form,

but with untold variations. The pothook, with the wooden handle for lifting the pots from the crane, seems to have come with the crane itself; the earliest settlers having managed comfortably enough with the green lug-pole and a stick for lifting the pots off.

One of the daintiest iron household utensils was the pipe-lighter, a delicately formed pair of tongs for lifting a red hot coal from the hearth to the goodman's tobacco pipe; on the end was a hook by which the lighter was hung near the chimney, and at the end of this hook was a broad perforated thumb for pressing the weed down into the pipe.

Tools, such as broadaxes for hewing timbers, frows for splitting shingles and cleaving laths, iron-covered beetles for pounding the frow, draw knives for shaving and shaping wood, were all forged out in the old blacksmith shops in the sweat of the blacksmith's brow. Nor must we forget the little pod-auger that dates so far back, that to the old folks the expression "pod-auger days" means almost before the flood.

Hardware for the doors and windows was always made in the blacksmith shop; and the splendid old hinges, measuring a yard across the doors, and the "Holy Lord," or "HL," hinges on lighter doors, have a texture which defies the modern imitator.

There were the small wrought iron implements used so constantly about the chimney place, such as the long-handled peel, or flat shovel, with which the housewife passed her raised loaves of bread into the depths of the brick oven; and the smaller, more delicately shaped shovels; also fire tongs, both large and small; and the jamb-hook, which held both shovel and tongs in place beside the hearthstone. There was the long-handled toaster, the broilers and the revolving spit, which was employed in divers ways, sometimes across the andirons and sometimes in the dutch-ovens and tin-kitchens on the hearth.

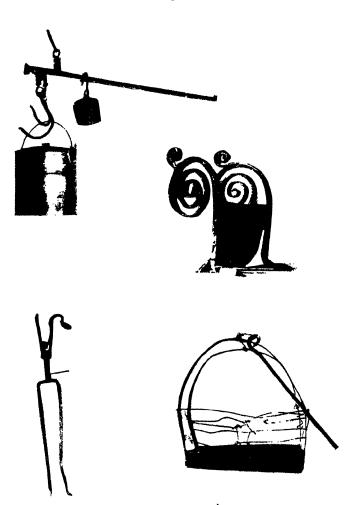
The blacksmith also made the rims and rimmers for the brick arches in which the brass kettles were heated for boiling clothes, dyeing, or cooking swill for the stock. The andirons themselves came from the hand of the blacksmith, as well as the little fire-dogs, which did the real work of holding up the heavy back-logs, while the more favored andirons smiled in the front, and were smiled upon. Overhead, with poles run through them to hold the drying clothes, the long bent hooks in the ceiling claimed birth at the forge, along with the rest of the fireplace friends. Hanging "clost up" was the spacious frying pan, hammered out of iron and finished with a wrought iron handle a whole yard long.

Crude cutlery, of course, was made on the an-

vils of these wayside factories: knives remade from the finest of files; long-handled forks for reaching deep into the great black kettles; ladles hammered out of thinnest colonial iron, with long handles ending with a curl—a curl, by the way, which the blacksmith of to-day does not achieve. Even spoons were made of iron—dainty, gentle spoons for gentle mouths.

With the carrying on of the work of the farm, the blacksmith had much to do. Traps had to be made to diminish the over-supply of wolves, bears, foxes and bobcats; marking irons were in demand for the identification of straying sheep, and these were made in individual letters to be arranged according to need, or joined together, in sets, to a wooden handle, each set bearing the initials of the sheep's owner. (The tar for these markers was generally kept in an old doughnut kettle, hung alongside the cellar stairs.) Meat hooks, for the hanging of frozen fore-quarters and spare ribs, were forged at the blacksmith's forge, and iron pestles and crude bootjacks.

For the convenience of the fisherman, who wanted a "mess" of pickerel from the nearby pond, there was the "pickerel jack," a boxlike iron affair, well supplied with criss-cross wires. This was affixed to the bow of a flat-bottomed boat and, holding a fire of twigs, threw upon the unwary fishes the light which ultimately led to



FROM THE BLACKSMITH'S FORGE Steelyard, boot-scraper, pipe-lighter and pickerel jack

their undoing. The five-pronged spears with which these fish were gathered in, were also made on the old bellows-fed forges. Chains for stump-pulling and hauling were made, whose links could hold a ship against a tide; and iron bands for wheels and hubs—and a hundred different things, which have come scattering down to us, to make us guess at their one-time usefulness.

Ploughshares were shaped in the blacksmith shop; and bog-hoes and stone-hooks came into being there, as well, along with the crude old garden forks, whose iron parts did not yield to the softer wood, until the handle was all but reached. Then there was the much needed "scraper" of handwrought design, handmaiden of the busy housewife, firmly fitted into the granite stepping-stone—a necessary implement, when the man of the house came in from the freshly-ploughed fields, or the children came home at dusk from school, bringing a goodly part of the highway on their heavy boots.

Of the many devices in iron for the holding of light, it is impossible to speak here, but mention may be made in passing of the simple, but efficacious, candlesticks of iron, which were rolled into shape and fitted for homely use; and which, having lived for more than a hundred years, now promise to light our grandchildren to bed, when we are gone. And the 'branches,' or home-made

chandeliers of wood and iron, which made the central lighting for some of the best parlors,—these should be mentioned.

One of the picturesque outputs of the village forge was the steelyard. The steelyards which came later have hooks shaped of bar iron, but the steelyard of the early blacksmith shop had hooks of unquestioned flatness; and along the arm the numbers crudely and crookedly marked out by hand, testimony to the scarcity of tools and equipment which the early smith had at his command. Little steelyards there were, and large steelyards, and the latter were made of the strongest forging and to them, hanging from the ceiling, was often fastened a great wooden platform, making the scales on which was weighed the heavy produce of the land, both animate and inanimate.

From slender steelyards and pipe-lighters, to ten-inch iron bands on solid wooden cart wheels, is a long step, but the blacksmith took this step whenever occasion demanded, and often sang the task into a hymn of praise and always into a work of art.

The chimney of the old blacksmith shop is losing a few of its bricks around the top and the glass behind the tire-barred windows is broken; the forge is crumbling and the bellows rotting away. If a breeze be stirring, the hospitably open door is creaking on its hinges; and the vines are still faithful, winding lovingly and beautifully over, under, and all about the quiet, historic spot. But though the last brick may fall and the vines eventually envelop the whole in fold on fold of rankest growth, the old blacksmith shop will live on, in its hand-wrought progeny of the past.

## II: With Broadax and Jackknife

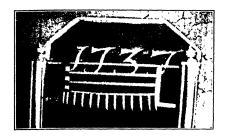
THOSE first sturdy settlers who came from Europe to America were forced to wrest even their necessities from nature; and from the trees, they hewed, hacked, whittled, shaved and gouged much

of their equipment for a vigorous life.

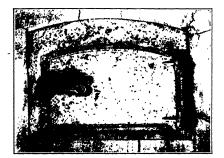
The pioneer had to study the woods of those great forest trees, which reared their heads everywhere, often to his discomfort. Pine, elm, oak, ash, cedar, each had its own possibilities, and held within its bark potential houses, grandfathers' clocks, churns, or doorlatches, which had been waiting through the ages for presentation to the

public.

The early settlers were not slow in finding out the attributes and possibilities of the various woods. Pine was the workable tree and gave planks and boards for building and an abundance of tar; the maple, besides giving itself through its sap, went into some of the finest of the old furniture and was unexcelled as "fewel;" the locust, spruce, chestnut and ash became, among other things, fences and posts; oak was in common use for furniture and was used also for staves in pipes and kegs; walnut furnished gunstocks and ax handles, although elder helped out on







CHIMNEY FURNISHINGS

"Fire-back" in a New Jersey tavern; oven door; brass tongs and shovel on original brass jamb-hooks

the pop-gun end; while buttonwood, basswood, hornbeam, beech, alder and larch supplied the tubs, spikes, turpentine, charcoal, windlasses, wheels and blocks, which were necessary about the developing farm.

It was the wooden plough and the wooden harrow, which opened up the virgin soil, and smoothed it into workable shape; wooden chimneys, in which the great hearth-fires glowed for the first months; and even wooden stoves that gave the idea for the soapstone and iron stoves, which did not come along until the first quarter of the nineteenth century.

Just as the early wooden sled runners and wooden skates soon became wet and squeaky, and did not slide over the snow as easily as their later-arriving substitutes, so the wooden chimney, daubed with mud or clay, and its green wood lug-pole for holding the heavy pots, often caught fire and overdid the heating of some particular house: or the lug-pole became charred and let down onto the family hearth quantities of boiling food. When a new chimney had to be erected, after the first hard days of settlement were past, it was made of stone, or home-made brick, but the lug-pole must still be a sturdy new green branch—for the iron crane did not arrive until a century later.

The simple tools with which the early settlers, and even their progeny of several generations

later, attacked the tree and its possibilities, may be counted quite easily upon the fingers of one's hands. There was the heavy ax for felling trees; the broadax of imperishable fame, with its crooked handle, for side hewing; the adz, or "shin ax;" the frow and beetle for splitting out shingles; the pod-auger, forerunner of the bit and stock; and the various shaves and the jackknife.

Equipped thus, the men of two centuries hewed, shaved, and whittled that which supplied

the major part of their needs.

Passing over with little more than mention, the homes which were made from the forest trees, there still remains an array of wooden objects representing practically every phase of living, every industry, and even the emotional needs of those early years.

A large part of the wood working was done during the winter months, when the men and boys were unable to work out of doors on the land. Whatever was to be made of wood, for use on the farm the following summer, was done at this season; and those things which could with convenience be brought into the house were wrought into final shape at the fireside. It was cold on the side of the room opposite the fire, and it was dark, for there were no lamps at first and but dim ones later; and the candles were but a pitiful glow, inadequate, when an exacting mortise needed a perfect tenon. If, then, one were to have light for

one's handiwork, there was only the great glowing throat of the chimney-place at which to work.

Starting at that pivotal spot of all early American homes, the kitchen, we find scattered about the long, low room samples of the unending industry of the men and boys of that first two hundred years. For the housewife, busy at her cooking, there were wooden spoons and ladles of all sizes and varieties; the rolling pin—for some unknown reason higher in the middle than at the ends—the butter-paddles of lovely red cherry; the lard-paddles of less rich texture; and the long, strong pudding stick, for the famous old "hasty pudding."

Says one old lady recalling the tasks of her girlhood:

"Hasty pudding? Yes, my dear, I knew it well. But it was not so very hasty, after all. We made it this way. We set a dish on the hearth holding Injun meal, and from this we took small fingerfuls, and dropped the meal into the boiling pot, a few grains at a time. It took us generally half an hour to get the meal dropped. Then mother always wanted we should stir it for the hour that it cooked. So you see it was quite a long task after all.

"When it was done, we turned it into a nappy, and served it from that, with milk. You can have this old pot we made our puddings in, if you like, and this old stick, too, to take along. I venture

I'll never want to make hasty puddings again—not in this world."

Up in many old New England garrets to-day there still rests in some dark corner what is generally acclaimed as "a darling cradle with the rockers gone." Nearly two feet long, this deep, cradle-like wooden affair is the old bread trough, in reality, into whose end-hollows the housewife fitted her wooden temse, and slid the home-made sifter, full of rye and Injun meal, back and forth, until it was properly smooth. This done, the temse was removed and the kneading of the week's supply of "rye-an-injun" commenced.

On the narrow, high shelf near the kitchen door stand one, or more, mortars and pestles of wood, for the pounding of salt, sugar, herbs and roots—and spices, if such a luxury were about. Potato mashers, and mashers for swill, have their own place; and at their side stands the quaint cracker stamp, made of a circular block of wood with an upright handle and iron teeth for the piercing of the home-made cracker. Little wooden toddysticks lie in the shelf corner, dreaming of their next good taste.

Standing one within the other on a lower shelf, we see a nest of what we might easily mistake for chopping bowls, but which are really butter trays, rectangular, or oval, in shape. But these would have been quite useless without the wooden churn, which stands in the shed with its wooden dasher

and long wooden handle, cleansed and ready for the next butter making. Wooden molds there are, too, in which to pack and print the butter for sale by the half pound, pound, or two-pound quantity; and tempting little circular butter stamps, with a rose, or an acorn, or a sheaf of wheat, cut into the bottom. Curved wooden ladles pat the butter, which is salted down into wooden butter tubs; and, after scalding and cold water applications, this complete set of wooden butter tools is laid away, sweet and fresh.

Cheese-making brings to light one of the staunchest and quaintest of the old kitchen implements, the wooden cheese-press, with its ropes and pulleys for pressing the whey out of the curds. This whey has to pass through two other wooden articles, before it gets at last to the pigs, for the cheese bag rests in a great open-work cheese basket, made of black ash; and that, in turn, rests upon a wooden cheese ladder or "tongs." When the cheese is finally put into the wooden hoop, a wooden "folla" is pressed down upon it; and the remaining whey, which has not previously drained away, falls into the slot of the wooden drain-board, on which the hoop rests. When the cheese, four or more inches high, and weighing from twenty-two to twenty-four pounds, is finally set away for its daily greasing and turning, it is placed upon newly scrubbed wooden shelves, in a wooden cheese cupboard, made to

hold two dozen of these luscious, yellow mounds.

At milking time, the receptacles into which the milk went singing, were quaint old wooden piggins, shaped like sap buckets, but with an extra high stave left at one side, by which the farmer might carry the milk to the house.

The tools and paraphernalia necessary for the spring sugaring, were practically all of wood, except the great iron kettle, in which the sap was boiled. There was, first of all, the wooden shoulder-yoke for the farmer's shoulders. From its ends thongs of rawhide were suspended; and fastened to these, were wooden hooks from a ready-shaped branch. On these hung the wooden collecting pails, when the time for "collecting" had come around. The sap bucket was suspended on the tree, from a hand-wrought iron nail shaped like a tobacco pipe; and the spout just above it, through which the sap trickled out, was of hollowed wood and was called the "sap spile." It was oftenest made of sumach, or ash. Before the sap bucket-which to-day seems old-fashioned, compared with the modern galvanized sap pails -common sap troughs were used, made of split and hollowed trees. As these were too heavy for removal, they were simply turned upside down at the foot of the tree, when the sugaring was done, until another spring should call them back into service.

When the sap troughs, or buckets, were filled,

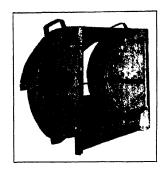
they were emptied into the wooden collecting barrel, which was made of staves, coopered with wood and shaped larger at the bottom than at the top. During the boiling and evaporating, there were several kinds of paddles used; some were best for the "lifting" and the "airing," others better for the "graining," and a short-handled paddle, somewhat like a butcher's cleaver, was best for the "stirring-off."

Home spinning, done with wooden implements shaved and whittled at the fireside, was picturesque in the highest degree, from the time the wool was carded and the roll was placed on the spindle, or the flax was hetcheled and ready for its wheel, down to the time when the clock reel had finished clicking off the skeins.

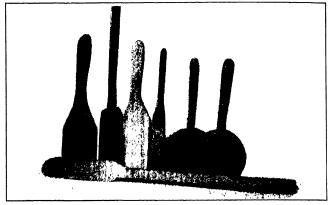
The flax wheels made in this country showed the skilled hand of the cabinet maker, but the great wool wheels were of simpler construction and were often turned out at home. In some sections, to be sure, one would sometimes see a man astride of a horse, riding along the country roads, with a great stack of wool wheels strapped to his back; this was the wheel-wright making his annual, or semi-annual, trip, peddling his much desired and most necessary handiwork. When such a neighbor promised to call on occasion, it was an easy task for the man of the family to hew and shave and shape the frame and head of this miniature spinning mill, even if he were not equal

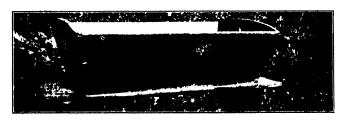
to the wheel itself. The graceful "swifts," the "niddy noddy," or hand reels, were also of home construction in wood, as well as the "finger," or "wheelpeg," with which the great wheel was kept in motion by the deft touch of the spinner.

When it came to weaving, the story was the same. Work done later in mills by machinery, was in early days done at home with the aid of wooden contrivances. There is perhaps no one industry which brought into being and use such a variety of interesting implements as weaving. There was the great wooden loom, with its heavy hewn beams and bars in the high solid frame which reached well to the ceiling, and its many parts of carefully shaped wood: the warp spools, the bobbins and shuttle, the skarne, the ends of the harness, the reed and the temple. However, before this loom of many parts could do its work, there was the busy work of the quill wheel, making ready the bobbins with which it must be fed; and those simple quill wheels are the quaint-est and most ancient looking of all the wheels. The "warping bars" and "spooling rack" also came from some inmate of the forest. The commoner shuttles were made of "pople," but the shuttle of real degree was always made of apple wood, which has the virtue of polishing itself, as it works; the quills, or bobbins, were made of elderberry, and it was one of the tasks of the boys of the family to push the pith out of this yield-









HAND-MADE FOOD UTENSILS

"Tin-kitchen"; hoop and draining-board from cheese-press; butter, lard and syrup paddles, and pudding-stick; "rye-an injum" bread-trough

ing wood, without injuring the outer covering. On the wall of the open chamber, where the loom generally stood—when houses had grown to be something more than kitchens—was the loom spool basket, of carefully braided reed.

Sometimes we wonder how the man on a pioneer farm ever found time to make all the things which were required for the carrying on of his household, as well as his farm; for even the women, in their daintier handiwork, had to depend upon wooden helpers. There was need for wooden forms, over which to shape stockings and mittens; there was need for long, smooth, nicelyholed quilting frames; a hooked rug demanded a hook of just the right proportion and size; crochet and knitting needles were made at home -and so on through a variety of needs. If a young bride-to-be lived far from the sea and could not get the whale-bone for her bodices and corsets, she had to be content with having her stays stiffened with splinters from the swamp oak; and father, or brother, must bring out his great jack knife and do the splintering. These are but a few of the needs of the ladies.

While the shoemaker was supposed to ply his trade in leather, he must still have his shoemakers' "kit," with its convenient compartments and broad seat of substantial wood, and his "shoemaker's jack" and his wooden vice. And what of the work of an early shoemaker, who had no

heel pegs made of good hard maple, and no sturdy wood for heels, and no aspen, or poplar, lasts, on which to shape his wares? The tailor, too, had his need of wood, for without a pressing board of ample proportions, the homespun suits of clothes would never do him credit; and the hatmaker knew only the wooden block for his shaping skill.

Barring the water and the soap and the good warm sun and wind, the woman of the seventeenth and eighteenth centuries did her washing with the willing aid of wood alone. Her scrubbing board, when she had graduated from washing at the brookside, was innocent of glass or metal covering, but was chiselled and grooved from wood into the proper corduroy surface; her tubs, or "cowles," were either burned-out and gouged sections of a tree-trunk, or made of wooden staves; while her clothes dried themselves on growing branches, or later were pinned to a hempen line with headless wooden clothes-pins. When the clothes were dry, back in the eighteenth century, the fine homespun linen was ironed with a cold block of wood, and exquisitely polished for its next usefulness.

After one has delved into the early days of settlement in America, and become familiar with the hardships of those momentous times, there still creeps in a feeling that these early fathers came to a land and a home, rich beyond computing. The very cause of their starving periods—the abundant growth of forests, and their too slow removal for immediate crops—became in a short time the foundation of their wealth and the fund from which they drew their luxuries. Look into one of these old homes and remembering, or even forgetting, those things which have already been mentioned, see the articles of everyday use with which the family was blessed!

The furniture of oak and maple, pine, cherry and ash is, of course, the first thing which strikes the eye, but it is too familiar to need special mention. There are little things, however, which would perhaps go unobserved. Close by the hearth hangs the gracefully shaped bellows, and there is the footstove—ready, perhaps, with its glowing coals to be carried to Meeting—and the "splinter broom," originally a gift of the Indians, and made of yellow birch, close shaved and turned back upon itself. On the chimney shelf stands the pipe box, and close beside it, on a peg, hangs the wooden boot-jack, for removing the heavy boots of the farmer at the end of the day: and, on the next peg, the school slate, with its hand-fitted wooden frame around a crude piece of native slate. There are kegs of slender staves, and pails with no handles, but only ears, through which a stick is run, in place of a "bayle." There is an oval foot-tub with high ears at the ends; and, close to this, the cradle, the rockers worn with

the sharp edge of a plane. As time went on, this shave was no longer a part of the kitchen industry, but found its home in the shed.

Of its usefulness for dishes, there is much to recall about wood. One of the earliest wooden dishes used in America, and one which was copied from its originator, the Indian, was the great burl bowl, made from the growths which sometimes appeared on the sides of the trees—oftenest on maples. These were hollowed out and were of a toughness to defy breakage. Then there was the old poplar trencher-and this word "trencher" was used for wooden dishes of various shapes, but the trencher which is still remembered, by one who actually used one as a child in the second quarter of the nineteenth century, is a plate, somewhat smaller than the modern breakfast plate, with a slightly raised edge. It is knife-marked and battered, but as firm and unwarped as it was in its prime.

Wooden noggins, or mugs with handles, were whittled out for a pastime and "Noggin Benny" is still remembered in one mountain village of the east, as a rather foolish old man who made the best noggins for miles around. Tankards, dippers, spoons and cups were all made of wood.

Baskets were another wood-product, and those which were made of broad strips of the black ash, hammered with a wooden beetle and split into working thickness, were of a most durable quality. One old basket-bottom settee, made by a

basket-maker eighty or ninety years ago and still in use, is without a single break. Baskets in the old days were made for, and saw, real service, and were used for the heavy work of the farm; also for pickerel traps at the outlet of ponds; for sieves; for keeping bread; for carrying seed at the sowing—besides all those uses to which we submit baskets to-day. In 1675 some one mentioned, among his choice possessions, a hamper, but called it a "wikker Flaskett."

In the "sisters' house" in an old community village, there has stood for two hundred years a great bread basket, standing about four feet high. It was made by one of the faithful sisters, who spent much time in meditation within her narrow room; and it was undoubtedly intended for long and honorable service. Perhaps the basket was like the thoughts of this lonely woman, larger and fuller than the narrow confines of her four walls would seem to warrant; and certainly it was broader than the door, through which it should have passed out to service. When the great task was finished, the basket would not pass through and was doomed to stand where it was made, as long as the walls of the house should stand. However, although it has not served as the maker intended, at least it has never worn out, and has remained a lasting monument to the patience and pains and labor of the early eighteenth century women.

The printing of calico, prints, and wall papers was done by wooden blocks, while the famous old woodcuts speak for themselves; the inner foundation of school-book covers, made in the early eighteen hundreds, and the horn-book which preceded them, were made of thin wood.

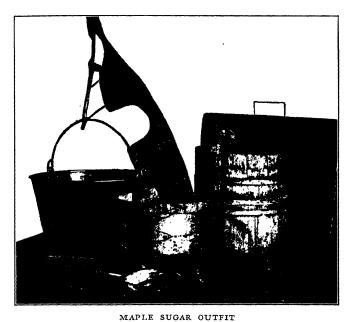
Even the passage of time was recorded on wood, the notched stick and the hour glass giving place to various high and low clocks of every description. The sun told the passing hours on the homemade wooden sun-dial; and the direction of the wind was indicated by a wooden cock, or weatherwane.

But whether the sun shone, or hid its face, whether the snowdrifts gathered in their might, or dwindled away to runways of slush, the evening fires glowed, and the whittling and shaving and polishing of wood went on within doors: and out in the sheds, or the shop, the more cumbersome articles for use on the farm came into being.

Containers and receptacles were needed, particularly casks, some of unusual sizes, such as the smaller keg, the larger barrel, the next larger butt, the hogshead and the superlatively sized pipe. The powdering tub, or powder trough, nearest of kin to the pork barrel, was for salting meat—the word "powder" being used for "salt" in England, previous to the sixteenth century, and coming to America in good standing. Some of

these wooden vessels were made of staves of the yellow, or upland, white oak; molasses and dry casks were made of red oak, and these staves were fitted in a water-tight circular form by the nice manipulation of the "jointer," a jack-shave for finishing the sides of the staves on the slant. The heading to these vessels was oftenest of chestnut. The cooper hooped these casks with wooden hoops, carefully intertwined, or "locked," if the work were to be especially well done.

The tubs which were made without hands, so to speak, were sections of tree trunks, burned, gouged, shaved or scraped, until the heart was removed and only the firm outer wood remained. These were oftenest made of basswood and, when the hollowing had been accomplished, a pine board bottom was pinned in with oaken pins. A few of these old tubs, some measuring thirty inches across, are still to be found on New England farms, and show the wear and tear of service, as containers for seed, feed, or meat, although still staunch in their build. Other casks were used for pounding corn, and these stood a good four feet high and were smaller at the bottom than at the top. Great heavy mortars were made in the same way, and used for grinding corn and salt. The pestle was sometimes the natural root of a tree, grown conveniently with a right-angle joint; or again, a block of wood fastened to a growing tree, which was bent down to pound and



Two sap buckets; shoulder yoke; brass kettle; paddles; evaporating pan

swung back of itself to be ready for the next downward stroke.

If we had visited the pig-sty of those early days, we would have seen the trough for food, made, not of wooden boards as it is to-day, but of a hollowed log. The water troughs for the stock in the barn yard and the water troughs along the roadsides were all of hollowed logs. Water-soaked for generations, some of these veteran water containers are still doing business at their old stands.

One of the especially interesting wooden implements of old time farming was the flail. It was made of ash and had a heavy straight stick handle and a "swiple" or "swingle," attached to one end. This attaching of the swingle was done in many ways, but always cleverly. Some swingles were held to the handle by eel skins-in fact, in some sections, this was the universal custom; some had a swivel made of leather, which gave the required freedom for threshing the grain; but the most interesting attachment was made of a piece of beautifully whittled ash, shaped like a shoulder voke. This was bored with small holes along the front part and then bent down over the handle until its sides rested against it; and here it was laced across from hole to hole with tough leather thongs. From the open space thus left at the top, the swingle swung free on its leather thong.

Hoops of thin wood were made and covered with perforated leather, for grain sifters; and

grain fans for winnowing the chaff from the wheat were made in a semicircular form of the thinnest wood, with attached wooden handles.

Even water conduits leading from spring to house, were made of wood. In one New Hampshire village, there is a broken line of these hollowed hemlock logs, with the bark still clinging, which was laid more than a hundred years ago. In fact, the spring from which they once led the water to the old parsonage, has been lost to the memory of man; and yet, lying along the bed of a tiny brook, the conduits are still preserved, and appear and disappear enticingly from under the overhanging banks.

Stoneboats, handsleds, bob-sleds, gambrels, yokes, tethers, pokes, windlasses and blocks-the last of buttonwood—all came from the same rich capital, deposited to the credit of the early set-

tlers.

## III: Colors from a Dye-Pot

"Why, no, we never had talk about 'dyeing' in the old days; we just 'colored' our yarns and homespuns. I can see mother's old indigo dye-pot now, setting there by the stove, so the dye would always be lukewarm and ready. Yes, a blue dye-pot was as much a household need as a teapot, in those days."

Serenely knitting as she talked, the old gentlewoman recalled the time when the blue dye-pot played a real part in family life.

"Mother's dye-pot was a brown earthen jar with a round wooden cover over it; and as I re-

call it, it held about two gallons."

If the housewife of earlier days developed her practical side by her cookery and spinning and weaving, her study of garden herbs and the brewing of simples and bitters, surely in her "coloring" she found the handle, whereby she could open the door to the artistic side of her nature. Just as in later years her bits of colored prints, delaines and copperplates, grew into radiant bed quilts, so in the years when these fabrics were not available in the ordinary home, did the blue dyepot become her outlet, her magic artist's brush.

Strong, vivid and easily "set," indigo blue was

the favorite color of the early days, and it is hard to know whether its popularity lay in the fact that the traveling indigo peddler brought the commercial product to the farmhouse door, making it thus easily available; or whether the peddler chose his trade because the popularity of the color was so firmly established that he knew he should soon have his stocking full of money. However that may be, indigo blue may well be called the "class color" of the colonies. Not to colony days, however, was coloring blue confined, for, although it was begun before 1700, there are women living to-day in the country sections of New England, not to mention the mountain women of isolated sections of the country, who had their share and hand in this time-honored industry. One farmer's wife there is, who put her blue dye-pot away so recently as 1900.

That there was really a blue dye-pot in nearly every kitchen seems to be an established fact. Standing close to the stove, or in earlier days at one side of the chimney place, the dye-pot was often the only seat which the little children had reserved for them in the home circle of warmth and light. Even in the kitchens of the early inns and taverns, the blue dye-pot had its place—although the odor from it, if the cover were removed, was often offensive, the pot "sending forth a pungent, fetid odor, if the contents were stirred up." Daniel Webster, being annoyed by one of

these busy coloring days in an inn in 1802, dubbed the innkeeper "a knight of the blue dye-pot."

The earthen dye-pot, which is still found in the cellars and garrets of old homesteads, is one of our loveliest bits of old pottery. Standing about fourteen inches high, it is made of a light brickcolored clay, heavy but simple in its lines, with a base which is substantial and broad, although slightly narrower than its top. This top is open, showing no ridge into which a stone cover could have fitted, but depending upon the wooden cover, which was apparently considered better for the condition of the dye. That these old clay dyepots were extremely porous, even in their young days, is shown by the glazed lining of black with which they were always treated; and to-day one has to be exceedingly careful not to strike them roughly, as they chip all too easily. Some families used wooden tubs for their blue dye in place of the earthen variety, and these were heavily coopered against leakage; others had their dye tubs made from the cross section of some great tree, hollowed by hand with a curved shave which was cunningly shaped of iron, to fit the arc of the particular chunk in question.

Although "coloring blue" was preëminently the work of the woman of the household, it was a process simple enough to come within the domain of the bachelor, if he lived alone and felt the need of more blue about his home, or person. One old man, remembering a neighbor of his who lived all alone, tells how "old Mead" had his dyeing abilities made known.

"Old Mead," he says, "lived all stark alone. He warnt overcareful in his housekeeping, I cal'late, living thataway. One day some of his neighbors come a-haying for him; and when they come to go in for dinner, old Mead had a stew on the stove that he'd been keeping het up. When the neighbors had their share spooned out, by golly, it was a deep blue. He'd forgot to rense out the dye-pot before he put the stew in. I was telling you he warnt over nice. After that folks always said:

"'It's as blue
'As old Mead's stew.'"

In some families where things were done on a fine scale and the mother, with perhaps ten children, found it difficult to keep up with all the stages of home production in the line of wearing apparel, visiting spinners, weavers, dyers and tailoresses came and stayed for several weeks at a time. Sometimes they spun into yarn the wool that had been accumulating through the months; colored the yarn, or a part of it, in the blue dyepot; and wove it into lengths. This homespun product was called "frocking."

When these busy weeks came round and the dye-pot was in constant use, it was necessary to plan ahead for the large quantity of lye necessary for the work of dyeing. To assure this, there was an understanding, not only among the members of the family, but also among the hired men, that all of their chamber lye was to be saved for the blue dye-pot. Naturally the odor was most offensive, but one little gentlewoman tells us how her mother, a woman famous for her thoroughness and care in spinning and coloring, kept her dye-pot entirely inoffensive.

"Mother," she says, "always had a little bag of hardwood ashes in her dye and a root of sweet flag to offset the smell. She freshened her ashes every once in a while. Her wools, I remember, always afterwards had about them an odor of

sweet flag."

Then, if the indigo peddler had not failed in his annual, or semi-annual pilgrimage, the indigo

was put into the lye.

Says our old friend again: "Indigo came in lumps like saltpeter. If it was really good indigo, it cracked open and showed a little line of gilt, or bronze. Mother used to tie up a little in a cloth so that she could pulverize it, then she squeezed it into the lye."

Others speak of the indigo which they used, as being a dark, dull blue powder which they put into bags and left in the dye-pot for a day, mashing it thoroughly when it became soft.

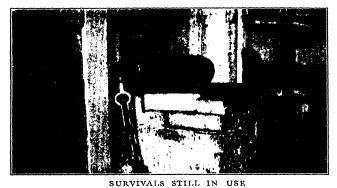
"Different things took different lengths of time to color," the reminiscing continues. "Mother used to take the yarn, or homespun, out and wring it two or three times a day, and then she would air it over and over. Sometimes it stayed in the dye-pot several days before it was the right shade of blue, for sometimes the dye was strong and sometimes it was weaker."

John Burroughs, in writing of his boyhood days, tells how his mother dyed blue and white yarn. The skeins were wound with string and thrown into the pot, where they lay for weeks. When the coloring was deemed well set and deep enough, the skeins were wrung out and the strings removed; then the variegated yarn appeared, which was ultimately knitted into stockings, mittens, wristlets and comforters for John and his brothers.

One of the old, popular articles of dress for men, especially on the New England farms, was the handwoven frock. This was a heavy woolen garment, made somewhat like an artist's smock, but buttoning high at the neck and close at the wrists, and dropping to just above the knees. "Frocks" were used only for work about the farm by those who had "Sunday best," but many of the less well-to-do farmers wore their frocks even to Meeting. The wool for them was carded, washed and spun by the mother of the family, half of it left a natural white, while the other half was colored a bright indigo blue. When woven and in final form, frocking was of a tiny







"Brick arch"; blue coverlid; detail of "brick arch"

blue and white check; and now, when some of it comes to light, even after many years of hard service, it shows a blue, which is as clear and beautiful as that of many new garments. Who of us does not remember the almost brilliant blue of some old precious coverlid, dyed and woven by a long departed ancestor? The blues in each are similar, although the frocking blue was often of a lighter shade.

The family which can boast of one of these old frocks has something to be glad of, for in this one product of the old home industries may be followed the work of the wool cards, spinning wheel, reels and the blue dye-pot, succeeded by the labor accomplished on the old hand-swifts, quill wheel and loom, with all its many devices; the frocking finally being made practically weatherproof by the fulling stocks-this, without mentioning the tailoress with shears and goose. Does one find these old heirlooms packed carefully away in camphor against the buffalo moth and marauding mice? No, indeed. Go to some back shed, where the woodpile stands and there is old iron and sacking stored away, and there on a rusty nail you may find a forlorn, drooping frock hanging by the neckband! Or if there is a garret over the lean-to, where the housewife seldom goes, you may find one of these treasures of the old dye-pot hanging from a rafter, where a spider, more appreciative than the busy humans, has spread across it his silken web. President Coolidge has treated the frock of his grandfather better than this, and in his old Plymouth home, it is still held in

appreciation and respect.

While "coloring blue" was undoubtedly the oldest dyeing done in the homes, blue was not the only color achieved by the home dyer. Quite different in the materials used, and different, too, in its processes, was coloring for reds, greys, yellows and purples—and surely a more exciting art and one which called for a nicer discrimination than that of the blue dye-pot of the fireside. One can almost feel the delight that the early mothers and daughters must have experienced, when a new shade, or tint, grew under their hands—they, whose nearest shopping center was a hundred miles away, or perhaps in London.

Many pictures have been drawn for us of the elegance of the early homes with their outfitting from across the seas. Most of us know that these homes were the exception in the land; and that the vast majority of homes were furnished with only those things which could be produced on the farm, and hand-made by the family. What we perhaps do not realize, is that in the most expensive homes, the women of the family did strenuous housework along with their servants. Old diaries written by mothers of well-to-do families show how faithfully they performed, each hour of the day, those duties which they had set

for themselves; and some of these records give explicitly the number of knots spun on the old wool wheels, the amount of washing they gave the yarn, and the coloring which it finally received. Coloring, then, was a task for gentle hands, as well as more hardened ones.

Unlike "coloring blue," in which the yarn, or "stuff" goods, was placed in the lukewarm dye and left to itself for a period of absorption—barring the squeezing and airing—coloring for other effects was accomplished by boiling. The great brass kettle, perhaps the "five pail" size, was now brought into play. Just as happened always when clothes were to be boiled in it, or boiled-cider apple sauce was to be made, the kettle first underwent its thorough cleansing. Wood ashes scoured it in some homes, but the quick and equally efficacious method of cleansing was with "half a cup of vinegar and a tablespoon of salt, and using your judgment for thickness."

In the earliest days of coloring, when the crane swung in the open chimney place, there was always a hook found free for the dye-pot; and here in the heat of the flames the women stirred their yarns with ceaseless vigilance, for one may not color, except it be in indigo, and dream dreams by the casement. Stirring and airing, stirring and airing, surely there must have been some old, now forgotten, couplet which helped along this household task, as there was for many another.

In those kitchens, where the brick arch was a part of the equipment—a part thought most necessary in the old New England houses—the coloring was done in the brass or iron kettle which fitted down into this. These arches were really square. bricked-up stoves, built within the kitchen, with an iron door through which the kindling was passed, and a cover of iron, whose center was a series of iron rings, called "rims," which fitted closely into each other and which, upon being removed one by one, would fit a pot or kettle of any size. When the "rimmer," a little hand-wrought iron lifter with a hook at one end, had hooked out the proper number of rims to fit the desired kettle, the latter was lowered into the opening, and suspended thus closely over the blazing fire. was soon boiling merrily.

Now comes the dropping in of the pigment; and many and original these pigments were, ranging from the petals of the spring flowers in the posy bed under the window, to the very earth beneath the colorer's feet. Sometimes it seems too bad that to-day there is so little left for us to discover for ourselves, so little chance to use our ingenuity and have the pleasure of the thrill that always follows. Or is the opportunity still here and only the desire lacking, after all?

Most of the old quilts and homespun dress goods, which we have still with us to-day, had their coloring done while yet in the yarn state. Some "stuffs" and cloth were colored in the piece, but this was not so usual a proceeding. Of course, many of the old blankets were woven from the natural grey wool, which had never been dipped in a dye-pot, but one of the first artificial colors which was used was undoubtedly brown, this being one of the most easily produced with the materials available. One very beautiful homespun coverlid was woven of blue and brown and both colors seemed to gain in strength and beauty by this combination.

Perhaps no other color was arrived at by so many paths as that of brown. Two elderly women were chatting, not long ago, of byegone days and ways:—

"Do you remember, Calinda, the day we went off to Uncle Eben's pasture to gather butternuts,

over under the big tree by the bars?"

"Yes, Calista, it rained before we finished gathering and you stained your cuffs with the butternuts. How many they did look when we got them spread overhead on the lean-to floor."

"Mother always wanted a good flooring of

them for her coloring."

"For her coloring, Calista? My mother used the bark of the butternut tree."

"Oh, no, Calinda, not the bark, I venture,—the shucks."

"Yes, I remember well, my mother used the bark."

"Well, mother used the shucks. But perhaps

they both colored brown, my dear."

"Perhaps so, Calista, but don't you remember that butternut bark would dye a different color every month? It was always brown, but when the bark was new and fresh in the spring, it colored a deep seal brown; and as the year wore away, it grew lighter and lighter, until it reached a shade that was almost tan. I remember how mother used to put her yarn right in with the bark, while it was boiling."

Shucks or bark, each had its usefulness in different hands. With walnuts it was the same; hulls, as well as bark, were used for coloring brown; and the bark of the red oak and hickory and the maple, as well; while, for a very deep brown, the low spreading alder held "virtue."

For coloring yellow, there was a variety of vegetable growths such as yellowroot, known to-day as yellow-wood; the root of the barberry, especially desirable for woolen goods; the petals of the Jerusalem artichoke; and the petals of the St.-John's-wort. The bark of the sassafras, and both the flower and leaf of the balsam, gave forth a yellow dye, while "saff'on," that aromatic and pungent favorite of old gardens, did its yellowing part. In the southern states a yellow dye was made from the dyeflower—of the sunflower family—and also, in certain sections, from a clay which gave the necessary pigment.

For real downright thrift, however, and common sense and popularity, the onion held first place in coloring yellow. Every family made a point of saving all of its onion skins, for this sunshiney work, and many housewives used nothing else.

A step further with this glossy-skinned friend and we find its boiled skins hobnobbing with a light concoction of the blue dye-pot and becoming a gorgeous green. Pale indigo was also used with the juice of the golden-rod blossom for making green; and with a decoction of laurel leaves and hickory bark; but there seem to have been no vegetable pigments sufficiently green in themselves to pass on their glories to others.

Apparently the natural grey of the sheep was not always of the desired shade, for wool was often colored grey, and here again we find butternut bark coming to the front, as well as that of white maple, whose grey verged on the drab tones. Sumach, too, made a heavy drab. Dockmackie, called "dogmachus" in some country sections, was one of the surest grey makers. An old recipe says: "Take the dogmachus bark, stew it in water, strain it, put in the goods. The color will be grey."

One woman whose husband is still wearing the socks which she colored blue and knitted for him a few years ago, says:

"Dear me, black? Black was the hardest color there was to get and set right. And you never

could match blacks, there were so many of them." While there were several approved and muchused black dyes, they seem to have been chosen for the particular kind of material on which they were to be used. For linens, "creeping ivy," or mercury, made a black that was deep and indelible; for cottons, a steeping of scrub-oak bark and red maple bark was considered unequalled in those sections of the country where the scrub-oak grew; while woolens might be boiled in the cloth with a quantity of common field-sorrel leaves, dried and aired, and then boiled again with copperas and logwood. The logwood held the coloring qualities and the copperas, the setting propensities; the former being the heavy redwood heart of a South American tree, the latter, a green vitriol. Another black dye for wool was gall-berry leaves and sumach berries steeped together. To-day, for the black ducks in their charming sweet-grass baskets, the Indian women continue to do as their foremothers did, and make their black dye by chewing the eggs of the salmon and mixing the pulp with coal dust.

Then there was red, the joy color of many hearts. The usual pigment for this was obtained from the cochineal, formerly believed to be a seed, but in reality the dried body of an insect found on the cacti of New Mexico and Central America. Although this was a commercial article, it was used generally in home coloring. Among the

home products for coloring red was the pokeberry, and this, boiled with alum, gave a fine crimson. In the south, again, the women depended for their red dyes upon the earth itself and knew of a certain lichen, called "dyer's moss," which contained a red pigment; and also a certain limestone formation which colored a lovely soft rust red.

Finally there were the violets, or purples. Again we find pokeberries making their way to the dye kettles, but this time under the old name of "garget" and without the alum; and, strangely enough, when the yarn, or cloth, comes forth for its wringing and airing this time, it is not a crimson, but a splendid purple. Elderberries and sumach berries gave forth purple juice, and in some sections the tops of the cedar trees were used for a like dye. One old and very popular color which inclined toward the purples was obtained with "cudbar" or "cudbear," a dye secured from a certain lichen. One old lady holds up her hands in horror, as she remembers its popularity when she was young, and describes it as verging strongly on magenta and being "awful homely." The violet dye which seems to appeal most in retrospect was that obtained from the petals of the purple flag, or fleur-de-lis. When one hears that "it colored soft white wool with a delicate shade of violet," visions of gentle old ladies rise in the mind, rocking in their arm-chairs, stroking, now and then, the soft warmth of their pale lilac

shoulder shawls, as they tat in the waning light. The following advertisement appeared in a central New York state newspaper of 1823, and in the one hundred and more years which have elapsed since first it gladdened the hearts of home-colorers, the meaning of some of the wares mentioned have slipped from memory.

DYE STUFFS. Campeachy and St. Domingo stick Logwood. Ground Hatch and Logwood. Ground Camwood, Oil and blue Vitrol, Nut Galls, Allum and copperas. Spanish Float and Bengal Indigo.

One of the comforting things about these vegetable dyes is that they were not only not harmful to the fabric but were, instead, a real preservative for it and a lengthener of its life.

The "setting" of the dyes was studied as carefully as the methods of coloring. We know from experience that when berry juice is spilled on the table-cloth, we rest in the certainty that a kettle of boiling water will remove the damage. How then were the colors of elderberries, pokeberries, sumac berries and so forth, made to stay in the fabrics, after they had been put there, even at the boiling point?

The methods for "setting" were as home-made and unique as the color pigments which were used. Copperas has already been mentioned as making black "fast." Copperas came in greenish crystals and was applied to the dye water, either before the boiling commenced, or during the coloring

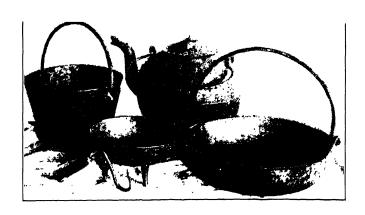
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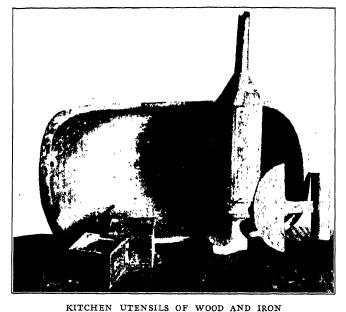
Indigo blue was not often "set" in any way, the length of time that the yarn, or fabric, was left in the dye assuring its permanency. Sometimes, however, probably when only a light shade was wanted and the article had been left in the dye-pot but a short time, good strong old cider-vinegar was applied and this was proof positive against the blue dye's vanishing from sight. Again, strange as it may seem, an addition of fresh chamber lye often served to set the color, as has been mentioned.

Red lye, made from cochineal, was set with soda; and then, as more general mordants, we find salt was used and the good strong soft-soap, which grew out of the endless labor of the housewife every autumn. Then last, but certainly not least in interest, was the use of rusty nails dropped into the dye to set the color. It must have taken some time for the dye to absorb enough of the rust to become a fast color, but we must remember that efficiency in the old days did not of necessity mean speed; and that, although there was an unending procession of tasks throughout the year, the materials and tools for every task were nearly always of slow home- and hand-made production.

Perhaps it was a bit hard in the old days to put quite so much time into mixing the dye, standing patiently over the hot fire and stirring with

long sticks, or a wooden paddle; perhaps the airing and drying and consequent pressing were fraught, too, with weariness—but, when the little bride's homespun and handwoven coverlid could boast a new shade; the dull linsey-woolsey dress, after five long years of service, could be made to blossom out into new color and life; or the boys have brighter stripes in their school comforters, surely the idea of coloring was not to be abandoned on account of the accompanying labor. Again, to create, to see coming into existence and your own life a new brightness, to win a gleam of surprise color from a bit of dull pigment—that must have carried its own thrill. Certainly, coloring blue, or coloring red, and even coloring black. must have meant a real triumph to the patient colorer, in those old scant days.





Iron skillet, kettle, doughnut-kettle, pot and pot-hook; sausagegun, chopping-tray, meat-chopper and spice-boxes

## IV: Lug-pole and Brick Oven

A QUIET colonial kitchen, pewter and brasses glowing softly in the low light from the slumbering hearth-fire; behind closed doors the farmer and his family sleeping soundly, although the latchstring to their stronghold hangs out: who-so-will may lift the latch and enter, rake back the ashes, blow into flames the banked embers, roast his potatoes in the ever-waiting fire and journey on refreshed.

Thus was the spirit of hospitality shown in olden days. Shelter might be dispensed with, but food was a necessity; and homes along those early ways made its preparation possible to the pioneer and his family.

In view of the great interest which has been shown during the last quarter of a century in old furniture, old brasses, old costumes and other old things, which together make up the family of "antiques," it is hard to explain the indifference which has been manifested towards that basic subject—the food of the olden days. He, however, who actually does turn in this direction, is so quickly rewarded, that very soon hasty puddings become as interesting as braided rugs, and "rye-an-injun" more thrilling than candlesticks.

One charm of this branch of antiquarianism is the array of quaint implements, to which one is suddenly introduced. The squat cheese-press is found to be as interesting as the beloved spinning wheel; gridirons and long-handled, standing toasters, make as strong an appeal as fire-dogs; while cherry butter-paddles easily win the race against bullet-molds, or powder horns. Think of the delight of handling familiarly such articles as skillets, trivets, pot-hooks, brass kettles, oven peels, butter-trays and cheese-baskets, or of working intimately with syrup paddles, cracker stamps, sausage guns, wooden noggins, wooden tankards and pewter porringers. With such equipment in our modern kitchens, would not the very cupboard shelves sing for joy?

It would be impossible to speak of all the foods which found their way to the tables of long ago, but there are certain early American dishes which it behooves us to record, before those who still remember, or use them, have grown silent. The pioneers underwent periods of extremely scanty food supply and their resourcefulness in times of actual want, shows, perhaps better than anything else, their ingenuity and determination. Not only were the cattle fed on browse—dried buds of hemlock and birch—when hay crops were inadequate for winter needs, but as late as the Seventeen Sixties, some of the settlers of New Hampshire were themselves forced to bake the acorns

of the red and white oaks and eat them, in times of food shortage. If there were grassy clumps among the forest trees which surrounded their cabins, they dug them out and replanted them for future pastures; and into the holes, left when the clumps were removed, they dropped potatoes which yielded their splendid increase. With the passing of the first hard years, however, the family boards seem to have become centers of abundance; and, although there was a certain monotony in the food, it was a monotony of good things, not hard to bear, and one which supplied strength and muscle for those strenuous years.

The tables of town dwellers were often spread with a lavishness which would now be considered vulgar; as, for instance, one meal which was served in the eighteenth century:—"ducks, chickens, hams, pig, beef, tarts, custards, jellies, creams, fools" (it does not mention the variety) "floating island, trifles, porter, punch, beer, wine," etc. The food, however, of the urban dwellers represents simply the wherewithal to purchase other people's products, and has not the same interest for us which attaches to the food that each family wrested from the land and prepared for its own uses.

Until the first quarter of the nineteenth century had passed, family cooking and baking was all done at the open fireplace: in great pots which hung from the lug-pole, or crane; among the

embers; or within the huge brick ovens. Fortunately we still have many articles of chimneyplace cookery, which speak plainly of their ancient usage. Great roasts of pork, beef, or venison, were hung on hempen strings; and through the twisting and untwisting of those strings were gloriously roasted on all sides. The Dutch oven, or tin kitchen, as it was sometimes called, was the next development. It was a tin, box-like oven, open on one side to the blaze, and standing in the ashes on its own four legs. On an iron spit running through it, the roasts of meat, or fowl, were skewered. They were turned by the crank handle at the end, and basted through the little door at the rear. One of the children often acted as "turnspit" to keep the roast revolving before the flame: and in some sections dogs were trained to this monotonous task.

The brass or iron pots suspended above the flame were simmering much of the time; and an early recipe, which has come down to us, showing one way fish was prepared in these pots, speaks of "the head of the bass boiled, the broth therefrom thickened with hominy." The lip of the moose and the tail of the beaver were considered great luxuries and found their way into the boiling caldrons.

Circular, revolving gridirons, which stood on three legs, took care of the broiling of venison and other steaks, and caught the juices, as they simmered out, in their hollowed spokes.

For the mincing of meat there were many formulas and often several of these were used on the same defenceless joint, before it was pulverized to suit the notions of those ancient cooks. We read of "myncing," "smyting on gobbets," "chopping on gobbets," "hewing on gobbets," "hewing," "dycing," "skerning to dyce," "kerfing to dyce" and then "grinding all to dust"; and after all this has been accomplished, "hewing small on morselyen," "hacking small" and "cutting the remainder on culpons." If there was any remainder, it must have been the original of our modern pre-digested pellet.

One recipe of early date is called "Head and Pluck" and has proven its popularity by persisting as a favorite, until the present time. "Take the head and the heart, the liver and the sweetbreads of a lamb, or mutton. Cook them well to-

gether. Chop them fine. Serve as a hash."

The most famous of our American minced meats, and the one familiar to us all, would seem to need no mention, for who among us does not know and love sausage? And yet, if you are one of those unfortunates, who has never shot the fresh home-made sausage meat into home-made muslin cases out of a home-made sausage gun, you have probably never known the perfection of old time sausage meat. Until fifty years ago, sausage-cases were not of muslin, but of the

middle skin of the pig's stomach, more usually called the "in'ards."

Of all the foods of earlier days, corn probably held first place, both for its nutritive value, and because it lent itself to many forms of preparation. The Pilgrims settled among ready-made maize fields, found native seed-corn, hidden for safety in a cache in the ground, and learned from the willing and friendly Squanto its cultivation and uses. Thus one of the earliest recipes is for "hasty pudding." So simply was it made in the great hanging kettles, so high was it in food value and so delicious in taste, that its popularity is not to be wondered at. "Stir up Injun meal and water with a snack of salt and boyle it in a pot." Surely this sounds hasty.

Another recipe tells of the corn meal being slightly sweetened and boiled in a bag, for "the well known hard Injun pudding made everywhere."

One woman in East Alstead, New Hampshire, whose mother used her brick oven long after the chimney place had been abandoned, remembers well the Saturday bakings; and in her description of them we find still another form of Indian pudding, but one which can not be called really "hasty." She says: "Early on Saturday morning the oven was heated with twigs and Mother always had ready a large pot of beans, an Indian pudding in a pan, and loaves of brown bread

and wheat bread. The first two stayed in from Saturday morning to Sunday noon and she kept adding milk to the pudding. When we drove home from Meeting on Sunday, dinner was all ready; and our Monday dinner was the same as Sunday.

day's, for it was wash-day."

We should not allow ourselves to be misled by the word "pudding" and believe this dish to have been a finishing course only, for the hasty pudding was eaten at the beginning of the meal, and often made up the entire meal, some families having "as many puddings in a year as there were days." As late as the beginning of our own century, hasty pudding was the regular Sunday night supper in many families, served first with milk for the main course; and then again with butter and maple syrup for the dessert.

"Hulled corn" was another substantial standby, and one which is still used on some farms. "We took a lot of white ashes," says a New England housewife, "boiled them in a kettle with a lot of water, until it was strong enough to hold up an egg, then drained it off. We put the shelled corn into this lye. Then we let it boil, until the shells came off with a little rubbing. Then it was done for that boiling. We washed it and washed it, till there was no lye left in it. Then we boiled it again, until it was soft and good to eat. While still warm, we put the corn into a bowl of milk and ate it. For dessert, we put maple syrup, or

maple sugar, on it. Or you may fry it in butter

for breakfast and serve with syrup."

"Fresh maize bread, baked in an oblong shape and mixed with dried huckleberries, which lay as close in it as raisins in a plum pudding" was another food, which, though having an Indian origin, became a white man's dish.

Popped corn was a standard food in the earliest days of the country; and Governor Winthrop in 1630 described it as "parched corn which turned inside out and was white and floury within."

Succotash was, at first, "corn seethed like beans," but later became our own well known corn-and-beans, which was rightly considered one of the tastiest of the old dishes.

For johnny cake, once known as "jolly" cake, we find recipes differing widely. One directs: "Kidney beans ground with Indian corn sifted. Boiled in a pot, eaten with East India molasses." Another tells with a nice precision that red oak is indispensable as a bake-board for it, and that the fires, over which it is baked, must be of walnut logs.

Roasted corn was considered always the corn dish de luxe and is poetically spoken of, so far back as 1618, in the following words: "The Indians lap their corn in rowles within the leaves of the corn and boyle it for a dayntie."

Used as a "dayntie," corn surely was, but its greatest usefulness was as the staff of life, in the

form of "rye-an-injun." This, of course, meant bread and was the only bread used for many years. Indeed some people are still living on the farms of Vermont and New Hampshire, who seldom saw wheat bread, until they came to maturity. "Rye-an-injun" was made of half rye and half Indian meal; and again of two parts Indian meal and one part rye flour. It was baked sometimes in iron pots buried among the ashes in the chimney place, but oftener on oak or cabbage leaves, spread over the floor of the great brick ovens, after the twigs and ashes for heating had been removed. Carefully the dough, for perhaps a dozen loaves, was inserted on the long-handled oven peel, and quickly turned by a deft wrist, to bake for a whole day in the leaf-lined cell.

This long baking naturally produced extremely thick crusts, often an inch in thickness, and these were used in many economical ways. One which an old lady remembers still as a great treat for supper, when she came home at dusk from school, was called "turkey." "Turkey' was made from brown bread, or 'rye-an-injun' crusts. Put into a kettle with hot water to moisten and soften them, and molasses to sweeten—molasses was sweet in those days"—she throws in casually, "and a generous lump of butter. Cooked long enough to blend all nicely together and eaten hot." Another of the very oldest breads was one part "Injun" meal and one part pumpkin, but this seems to have been a

bread of necessity, rather than a bread of choice.

To look into the question of early yeasts, is to delve into one of the most interesting parts of the whole subject of foods. Yeast did not come in neatly folded tinfoil packages, as it does today, but stood, a milky white fluid, in a glass, or stone jar and was as home-made a product as the bread which it raised. As proof of its unexcelled qualities, it is still used by many farm women to-day, who scorn the manufactured article. Before you study it, yeast seems a simple thing, but after you have looked into it with an enquiring eye, it becomes a mystery. Plenty of recipes we find for the making of leaven and most of them are built upon a potato foundation and achieve their phenomenal longevity by the addition of a little potato water every day or so. While all these recipes deal explicitly with the completion of yeast, it is difficult, if not impossible, to find its beginnings. For example: "Boil potatoes, wash and mix in a tablespoon of flour, then sift through colander. Pour in potato water, then let it get milk warm. Then put in a cup of yeast reserved from the old. Also pour hop water into this." Again: "Yeast? Why yes, that was easy to make. Put water in a frying pan. Everybody raised hops in the old days and stripped them off; you put one in—the cunning little green things! Did you ever see one? Then slice up thin two smallish potatoes, let them cook together until

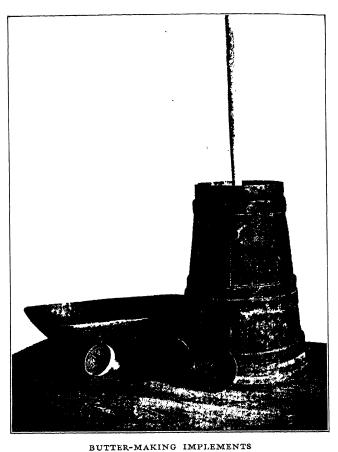
done. And the little hop will still be there," with a smile of loving memory. "Then mash potatoes and sift into a dish, then put in some of the old yeast and the salt. To keep it, add cornmeal, roll out flat and then cut into little flat, hard strips—lay away in a jar." Here is still another, an especially careful and substantial recipe, at the end of which come these baffling words: "—when cool, put in the yeast to rise." And all through our perusal of it, we thought we had come upon the true progenitor of the family of Yeast.

Trippingly these recipes fall from the lips of those women who still cling to them, but always at the simple question of where they procured their very first bit of yeast, there comes a look of surprise and thoughtfulness. One woman, whose yeast jar has stood on a shelf for fifty years and more, said: "I've never lost it in fifty years. I had it from Mother, and I suppose she had it from Grandmother." Another looked reminiscently across at the window sill, where her jar of yeast was cloudily resting in glass, and said: "Why, I never gave it a thought. It's just been there in the jar all these years—it must be seventy-five, for it was Mother's before me." Laughingly another woman answered, "I declare if I know where I got it, it's so far back. I guess I must have, wellborrowed it. But mebbe, it seems to me-is n't yeast something that grows, like mother on vinegar, you know?" And we are plunged deeper than ever in mystery.

One yeasty property was called "emptyin's," being the settlings in beer barrels; while in mash tubs the froth, which arose as the liquid fermented, was bought for yeast in pailfuls by people living near to the early gin distilleries.

The very whitest of all the old breads was what

was called "milk emptyin's." It seems to have contained within itself some real yeast quality, which depended upon constant stirring and a uniformly warm temperature, for its rising ability. Says some one who used to make it constantly: "I always put it into a little pitcher to keep warm to rise. Not more than a pint of warm milk, a teaspoonful of salt and enough flour so as to mix it up, as you would for flap-jacks, or perhaps a little more of a batter. Put it on the stove and keep stirring and stirring, until it comes up and is real milky. Then it will rise up nice and light. You mix it with a spoon with more flour, put it in tins and let it rise. Save out half a cup of batter and put away to keep cool in the shed, to make more. It'll keep, you know, 'till come spring." And then, as if the recipe had not already done its share, the old lady continues: "Take some out and put it into twisted doughnut shapes, put on a board and let them rise an hour, then fry them in deep fat, for raised doughnuts. Put on a little



Churn with dasher; hand-whittled tray; cherry paddles; round mold for printing

maple syrup, or boiled cider apple sauce, and they be wonderful good."

"Riz biscuits" was another yeasty product, which had the power of reproducing itself by being kept cool and dressed over each day with more flour. "They were so handy and easy for supper every night," says the old lady.

When these various yeast advices have been deeply pondered, we come to the conclusion that yeast is made by a combination of potatoes, salt, hops and heat, mixed with an understanding and sympathy which cause fermentation to set in, and behold—the great leavener of the staff of life, yeast forever and forever, on the kitchen shelf!

Baking powder was not used in the olden days, for the simple reason that it had not come into existence. Potash, a product of wood ashes leached and boiled down, mixed with cream of tartar, filled the place later usurped by this readier convenience. Potash, refined, became pearlash, and later was known as saleratus—still a home-made product. Even to-day, in a large proportion of farm localities, "baking powder" is not generally used. "Yes," you are told, "use baking powder if you've a mind to, but for me I like sody and cream-a-tartar best." In Lebanon, New Jersey, one old lady living only a few years ago, remembered well how her husband used to burn their corn cobs in the chimney place, in order to ex-

tract from the heart of them the saltpeter, which was her baking powder.

Baked beans, that great gift of the red man to the white man, is a dish which has come down through the years unchanged; and, although the old method of preparation, that of soaking the beans and then baking for many hours in a stone pot, is still the method of to-day, one would not have the temerity to speak of old foods and neglect this most famous one. It is said that some housewives baked their beans and poured them, while still hot, into a bowl, in which a strip of white muslin had been placed. Part of the muslin hung over the edge of the bowl and when the beans were cold and hardened into form, they were slipped out of the bowl and suspended from a rafter in the shed by means of this strip. Here, when school dinner-pails were to be filled, went the mother of the family and hacking off a section of the beans made them, a frozen delicacy, a large part of the dinner.

We all remember that nice slapping game, "Bean porridge hot, bean porridge cold, bean porridge in the pot, nine days old." It appears that this same rhymed bean porridge was one of the standard supper dishes for old and young, especially throughout the New England states, and there are old folks still living who speak of it almost lovingly. "Home from school," says one old lady, "on a cold, dark, winter's afternoon, to

a supper of bean porridge with brown bread crumbled in. And the bread was good old rye-aninjun." Ah, that blessed bread "crumbled in"! Over and over we come across that expression in old notes and in reminiscent talks. This, from an old man whose boyhood was in the late seventeen hundreds: "Bean porridge—boiling piece of pork, with handful of beans, till soft and smashed, then dipped into dishes with bread crumbled in."

The products of the dairy, of course, had a large share in the meals of the farm families. The soft white cheese made from sour milk, slightly heated and stiffened and strained, known as "Dutch cheese," or "pot cheese," and "bonny clabber" (which was lobbered milk, sweetened, generally with maple sugar) were two of the easy and much used preparations of milk; and the home-made sage cheeses were as much a necessity as bread, or meat.

The following description of cheese-making is given by an old lady, whose mother made cheeses in the first half of the ninteenth century. Leaning back in her armchair, with eyes closed to all but her memories, she reconstructed the days of her childhood:

"She sets the milk and puts a little runnet (rennet) in each pan, which turns into curd. Runnet is calf's stomach, cured in a certain way. Then she lets the whey settle, until the curd hardens. They had something which was called the cheese tongs,

made of four sticks crossed and this was laid over the tub and the strainer basket laid on this. The curd was put into the cheese cloth, which was inside of that, to drain. The whey drains from it: then she stirs it up and salts it. Then if she wishes to put in the sage, or corn water, she does that. Then she shakes it all together and cuts it up and squeezes out more whey, then puts it into the press. Then the foller, which follers the curds down into the hoop, is put in. When it has been in the press and pressed for twenty-four hours, she takes it out and trims off the edges. Then she puts it back into the press and presses it the other side up. Then she spreads fresh butter all over it. Then every day she turns it over the other side and puts on more butter.

"Mother made it in the months of July and August, when the butter did not come good. Kept on turning and greasing through the summer until winter. Sometimes a cheese will crack and then she put a strainer cloth around it to make it thick, and spread the fresh butter over this. That held it together. When the corn is young and the stalks are tender, she would take some of the tender leaves, pour boiling water over them, and when the curd had drained the whey from it, she would pour over the cheese this tea which gave it a green color."

Another old lady remembers making her own cheeses in layers of green and white for decorative

purposes. She says, "We mixed with some of the curds the sage, and put in layers of it and layers of white curd, in streaks." Still another woman remembers seeing her mother color her great cheeses with a tea made from the pigweed. The keeping qualities of these cheeses is expressed in a saying, still heard in country districts, "It hangs on, like the old lady's cheese."

Butter making seems to have undergone little change since the days of real antiquity, although churns have been made in various artistic models. The one thing about butter which has changed the most, is the price. In eighteen hundred it sold in Boston for eight cents a pound; and within fifteen years of the present date was procurable in certain sections for fifteen and twenty cents a pound!

For beauty of color and form, one must picture the old kitchens, when pie-making was under way. Try to visualize the busy scene in a low raftered kitchen, back in the chimney place days—if you insist upon the beauty of flickering light and dark shadow, the line of the lug-pole and its depending hooks and pots—or after 1816, when the first stoves were being accepted. Kitchens were still the throbbing heart of the homestead, at that time, and abounded in treasures of contour and color. The women, young and old, were busy at paring, kneading and oven-tending; for highlight, there was the sun pouring across the pumpkin-colored floor, or the white radiance of high-banked snow

at the low windows, turning to gold as it fell on brass kettle, or squat candlestick; for color, suspended dipping rows of sliced pumpkin, hung to dry, wooden bowls filled with yellow apples, or the glossy emerald of sweet greenings; this, neutralized by the array of pewter plates and basins on shelf and table, and all brought into strong relief by the great broad-necked crocks, filled with deep toned mince-meat and dried blueberries of violethued velvet. Hours of work would bring to the pantry shelves a dozen, or more, pies, each a steaming and odorous delight. Tucked away beneath fluffy crusts would be apples, pumpkins, squashes, mince-meat, custards or green currants; and in the berry line, blue-, bramble-, "roz-," goose-, or whortleberries; not forgetting, course, if the season permitted, the fresh pie-plant.

There were seasons, back in early times, when wheat did not mature well in the rough clearings, and pie crusts were not over dainty, nor fillings exactly "choice," but the plucky women showed great originality in devising substitutes for what they had not. There is a story about a woman of Newport, New Hampshire, who had to make her Thanksgiving pies of bear's meat and dried pumpkin, with a sweetening of maple sugar and a crust of corn meal; and it is recorded that her husband, blessed be his memory, said they were the "best pies he ever et." Certainly pies were a treat

in those days of scant variety and it is no wonder that the boys "et their heft in pies."

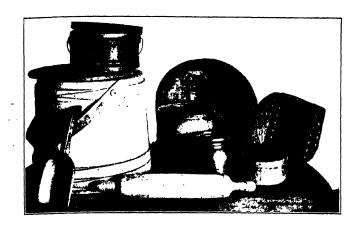
No breakfast was complete without pie; dinner could not be called dinner, without at least two kinds of pie—served together on the meat plate—and supper! Well, if there were no pie for supper, one might just as well kick off one's boots and turn in by early candlelight. And yet, in these hygienic days of calories and vitamines, the pie is haled before the courts and made to show reason why it should longer have a place among our carefully balanced dietaries. Especially is this true of the king of pies, old Mince Meat; and yet there is living to-day an old lady of ninety-two years, who has always eaten mince pie to ward off and cure headaches, and still has her piece of mince pie for breakfast—unless she has her shortcake.

The shortcake was a popular and filling dish, made of biscuit dough, layered and laden with fruit or berries. But cakes, as we know them to-day, had little place in the menus of earlier years. We hear of cakes, meaning the drop variety, being served at evening parties; of Election Cake, a raised sweet cake made once a year on state election days in Massachusetts, and eaten with veal as a celebration rite; of tarts made from the fruit of the briar rose; of flat, sugared caraway cakes, and of pancakes. These last were really a good deal more like cake than the name signifies, for

they were of unsweetened doughnut dough, dropped from a small greased spoon into hot fat, eaten with maple sugar and always for breakfast. Blueberry cake was an outgrowth of corn meal and blueberry bread and, having proved its superior qualities, has descended to modern times, while its progenitor has passed into memory. One old lady tells us, "There was always a plenty of pie, doughnuts, gingerbread and cookies with cheese, but cake only on company occasions."

The making of crackers was a home pursuit and, around the fires on winter nights, the boys whittled out the cracker stamps. These were of wood with handles about six inches long, whose circular block head, three inches across, contained rows of pointed iron spikes, about fourteen in number. In the center of the block, in bold relief, was carefully carved the initial letter of the family. This stamp was used for pricking the cracker dough just before it was put into the oven. Thus, with one stamp of this little implement, the cracker changed suddenly from a lump of flour and water to an embossed, autographed medallion.

The preservation of foods, before the art of canning was known, is an interesting part of old food study. We hear of spices and even perfumes being used for the preservation of meat for short spaces of time, but the drying of food was one of the earliest methods used in this country. Apples,





WOODENWARE AND STONEWARE
Pic-making equipment. (Below): "Charlestown" cider jug, stone
churn body, two dye pots, molasses jug

blueberries, raspberries, pumpkins, squashes, beans and peas were dried and hung away in paper bags, a closer covering tending to mold the contents. There is no prettier sight in the kitchens of old homes to-day, than the rows of cut and curled pumpkins, drying by the stove after the harvest time, in long graceful festoons. Sometimes frames were made and the fruit dried for many days in the autumn sunshine. Turkeys and other fowls were frozen and hung away, or sometimes packed, within and without, with snow. Quarters of beef, which were not to be smoked, were likewise dependent for preservation upon a long cold spell and were buried in the oat bins, among the threshed oats. Pork was smoked, frozen, or salted, and put into barrels in every man's cellar, coming forth not only for gracing the family table, but for treating infected wounds, sore throats, and other ailments. Where fish was available, it, too, was frozen; whole salmon, costing but five cents a pound, ending their days, hooked by the mouth to a dusty rafter. Milk was frozen to keep sweet and would continue so for indefinite periods.

Pickling was a favorite form of food preservation; and many things were pickled in the old days, which we do not think of as pickleable now. Parsley, nasturtium seeds, young butternuts, lemons, barberries, samphire, mushrooms, fennel, elder buds and many kinds of fruit were some of these, besides radish pods, and those parts of the butchered animals, which did not lend themselves gracefully either to salting, smoking, or freezing.

It was not until the middle of the nineteenth century that canning came into general use. About 1860 one of the daughters on a New England farm made a long trip of fifteen miles to visit her sister and learn the wonderful new method of putting cooked berries into glass jars and sealing them up for future use. Faithfully she worked with her sister, until she had learned the new way; and then went back to her home to teach her mother and the neighbors. A deacon's wife was among the interested seekers after knowledge; and jubilantly, the day after her lesson, she started in on the heaped up "rozberries." With jars well heated against disaster, she was ready to pour in the boiling red sauce, when the deacon entered. With firmness, he informed her that the jars would burst, if sealed while hot, and forbade her putting on the covers until the fruit was cold. Poor little wife and poor little berries!

Even after fruit had been canned successfully, it took some time to realize that vegetables might be treated in the same way; and still more time before meat was put up in glass jars.

Up to this time berries had been "put up" with sugar, in great open crocks, by the "pound for pound" method, and preserved themselves simply because they could not spoil. Some women to-day think that this is the only really "tasty" way to make preserves.

"Sasses," or sauces, were an ever-present necessity in the old days. They were often served for breakfast, sometimes for dinner, and always for supper. In 1817 Robert B. Thomas, in one of his early "Farmers' Almanacks," gave this advice a number of times: "The more sauce we eat, the less meat we want," and "A plenty of sauce diminishes the butcher's bill." Many of his faithful readers must have hearkened and obeyed, for every kind of fruit and berries that grew were stewed for sauce, and the custom has come down through the years. The typical farm supper of to-day often centers about the sauce which is served, and there is always a dish of it at every plate; it may range in importance from simple "garden sass"—fresh rhubarb—to the company dish of wild strawberries, but it is always there. If it is raspberries, let us hope that the berries have been dried and laid away in paper bags, coming to their first cooking just a bit before serving, for then only do they speak to one of their native heath among the pines and the hardhack, and the soft breath of summer breezes.

Boiled cider apple sauce was considered one of the winter delicacies and its manufacture and preservation are given in the following brief, but hardly exact manner: "Frozen boiled cider apple sauce. Make a barrelful and freeze. Take fresh cider—before it froths any on the stove—and fresh quartered apples. Sugar, except for sweet apples. Cook all day. Boil in a shined-up brass kettle—iron kettles turn the apples black."

Cape Cod has always been famous for that purely American dainty, cranberry sauce, and the berries nesting among their pale green foliage were gathered by the bushel and kept for months, either in cold water, or tightly corked in bottles.

Blueberries were not always allowed to attain their maturity but, when still green, were often gathered, stewed with sugar and used as a relish with meat.

Before leaving the subject of sauces it should be recalled that the word "sass" was not necessarily a colloquialism. In old wills, we find the word "sasser" or "saser"; apparently it was then sass in a saser, while to-day it is sauce in a saucer.

Sap from the maple trees boiled into syrup and sugar was one of the main dependables. Many families had no white sugar, but used this maple product for the table and for cooking purposes. The last run in the spring, which would not granulate well in the boiling, was used for molasses; while sap exposed to the air furnished vinegar. The main supply of vinegar, however, came from the aging of cider in barrels.

Lard was run off, when the sausage was made

at the time of the pig-killing. From the Indians came the secrets of extraction of oil from the butternut and the acorn, the latter being boiled in water with ashes of punk, or the heart of the maple tree. A substitute for pepper was made from the ground bark of the prickly ash.

An æsthetic touch was given to cooking in the use of old time herbs, those little plants which grew among the flowers in the posy beds, or in sunlit fields. These were cherished by the housewife, gathered and hung in the garret to dry, where they swung from the rafters in crisp little bunches. When properly dried, the herbs were carried again to the kitchen, crushed, or pounded in mortars with wooden pestles, and used as those seasonings, whose names are dear to us all. Spearmint, pennyroyal, sage, summer savory, thyme, dill and tansy, they vied with each other in beauty of name, as they did in virtue.

Of the drinks which accompanied these oldtime dishes, much may be said for their simplicity and wholesomeness. Eager to make much out of little, the housewife concocted her beverages from the herbs, wildflowers and berries of her vicinity. Once again we see the humble potato being pressed, or perhaps we should say "ground" into service. "Potato coffee" was a popular standby. Potatoes were cut for this purpose into small chunks, dried in a moderate oven and hung

away in a bag. When needed for use, they were roasted or burned, ground in a mill, or reduced to powder in a mortar. "Coffee" was also made in like manner from combinations of corn and harley, parched rye and chestnuts and the dandelion root. Tea was steeped from raspberry leaves. loosestrife, hardhack, blackberry leaves, sage, and even from the shining golden rod. Ginger water, both sweetened and unsweetened, dates back at least as far as the eighteenth century, and is still the favorite drink with farmers in the hot hayfields of July. Cider, of course, was an old reliable and, while a good deal was drunk "hard," it was also bottled and kept "soft" for those who preferred it so, by bringing the juice just to the boiling point, topping off the bottle with one raisin and corking tight; in this way, it kept sweet for months, or even years.

"Perry" from pears and "peachy" from peaches, were common drinks, where these fruits were abundant. There were also "mead" and "methaglin," fermented drinks made from honey, water and yeast, or malt. Many simple homemade wines were made from dandelions, elderberry, blackberry, or mint. While there were some heavier drinks, such as hum and flip, with which we will not deal here, there were some others which according to ancient but reliable sources, were "very pleasant drinks and sufficiently spiritous." One of these was made by boiling the young

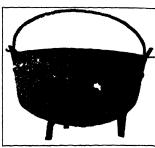
twigs of the black spruce until the bark could be stripped off, and then sweetening with molasses; another was the favorite maple sap "boiled down to a quarter part, fermented with yeast and flavored with spruce twigs."

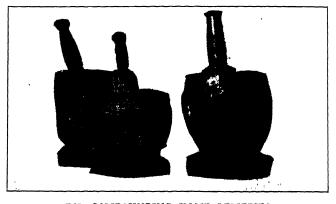
John Winthrop's diet was "pease, pudding and fish." A family living near Albany in 1743, and representative of the neighborhood, lived on a daily ration of hasty pudding, boiled corn and bread baked in the ashes, with an occasional treat of meat and butter. Asa Sheldon, a boy in Massachusetts in the seventeen hundreds, had summer breakfasts and suppers of "rye-an-injun" and milk exclusively, and a winter diet of beef broth with brown bread crumbled in, or porridge. On Saturdays he feasted on roasted potatoes and salt, and on Sunday had the beloved baked beans with salt pork, and the great "Injun pudding," for which he was allowed a little butter. Thanksgiving brought the real feast to him, as to all, and the tables "groaned" with their glory of fowls, roasted pork, or spare rib, plum pudding and mince and apple pies.

The country breakfast, which has gradually assumed the proportions of the city dinner, still makes use of the dishes of long ago, doughnuts, jellies, cookies, cakes and sauces, two kinds of bread, with meat and vegetable accompaniments—and, within the pie belt of New England, the often-present pie.

Much of the good of the old days has passed, but, in some sections, some of the good may yet be found, and this is well worth the cherishing, even if it touch only that prosaic subject, food.







FOR COMPOUNDING HOME REMEDIES

Bell-metal mortar and pestle; iron pot for brewing; three wooden herb grinders

## V: Early Simples and Benefits

THERE is perhaps no trail leading from the past to the present which traverses so many morasses and valleys, so many mysterious caverns and, again, such brightly sunswept highlands, as that of cures for human ailments. Cruelty, superstition, the use of noxious concoctions and bleeding were some of the milestones marking the way; but, as the path climbed higher, many of these were left behind, and we see it winding along the aromatic ways of brookside herbs, pungent roots and barks, and even slipping behind the palings of quaint posy beds.

Instead of the test tubes and vials of modern laboratories, the old-time maker of remedies used brass, or iron, kettles swung from wooden lugpoles; and earthen crocks and great green bottles, which stood sturdily in convenient pantry corners, where the mortar and pestle of wood, iron, or bell-metal was always ready to do its part in meeting the emergency call, or the spring dosing. Along the rafters of the garret, or open chamber, sweet-smelling herbs hung in brittle, drooping bunches—potential cures for family ailments,—and roots well pounded and simmered were "kept close" by the provident housewife.

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When the first settlers came across from the old country, they brought with them many of the Dark Age remedies, such as "roasted toads, well ground and taken internally, for King's Evill," "the Purples," or sundry ill-famed fevers. They had, however, a certain knowledge of the medicinal value of herbs; and soon, from their association with the red man, they added greatly to this knowledge by acquaintance with the new growths, which surrounded them.

There were cases of the Europeans' turning to the magic of the medicine men for help in times of illness, and, strangely enough, being cured of their troubles; but it was the savages' knowledge of herbs, roots and barks that the newcomer most gratefully absorbed.

Old women became adept in the uses of herbs and could steep, or brew a "simple," or a "bitter" for all needs. Was one unable to sleep through the long hours of darkness? A little catnip was dropped into the great kettle hanging from the crane, the resulting tea made palatable with sugar and milk, and swallowed with the faith which brought sleep once more to the pillow. Did one feel shivers down his back? A draught of pennyroyal was administered. A cough called for a drink of elecampane; stomach disorders were dosed with camomile, or wormwood; bowel trouble, with a warm thoroughwort tea; asthma demanded the aid of skunk cabbage; and a brew

of pipsissewa leaves was administered for troubles of the heart.

When the young athlete of four generations ago did the high jump over the pasture bars and sprained his ankle on a rolling stone, the leach was not called; but, rather, was home-rendered lard mixed with stripped wormwood-also good for the stomach—and bound on with a bandage of homespun. If a temperature developed from the mishap, there was the dish of cranberries, so cooling for fever; and inflammation was reduced by the use of witch-hazel, or by a remedy made from ginseng roots. "Ginseng cleaned, dipped in scalding water, ligueous bark rubbed off with dry flannel," the old recipe reads. The ginseng was next laid acoss sticks over a vessel, in which yellow millet was boiling, and covered with a cloth. The roots were then dried and kept "close," until the call came.

We are apt to smile, when the old remedies are mentioned, and shake our heads kindly, but firmly, when their application is suggested for modern disorders; and yet, there are physicians to-day of sufficient renown, who concede that those early "simples" and "bitters" of two hundred or more years ago, are among the foundation rocks of medicine to-day.

If we look at the early superstitions, so called, we find even here basic truths, submerged in a coating of local interpretation; as for instance:

"To cure a belly-ache, spit under a stone." Many a New Jersey child, after a too ardent game of tag, following a heavy dinner, has seen this magic work—realizing not at all that the bunch, into which he was forced to contract his small self for the operation, was responsible for his relief. From Maine come two or three time-honored and worthy standbys, which are more difficult to interpret. "Bloodroot hung over the bed of the children will prevent nosebleed" and "To stop bleeding, pennyroyal must be stripped, away from the root; strip it toward the root and apply it and you will die." Again; "You will suffer when you die, if you lie on a pillow stuffed with the feathers of a wild fowl."

In some families children always wore a string of "Job's Tears" about their necks during the teething period, these round seeds of an East Indian grass being famed as preventives of fever at this troublesome time. "They just ain't so fussy, that's all," one mother explains with assurance. Amber beads were worn to prevent croup; but, if the enemy did win, the patient was placed over a pail of slacking lime, so that the fumes might be inhaled for relief.

Old folks in some sections wore little bags of sulphur—sometimes suspended from their necks, sometimes worn in their stockings—to ward off any diseases which might be traveling slyly about; while others accomplished the same results by wearing camphor gum and asafetida in similar ways.

Rheumatism was prevented by carrying a horsechestnut always in the pocket; the efficacy of this device being satisfactorily proven by the fact that, after a few years of this constant transportation, the chestnut became hard and dark by the absorption of the rheumatic germs, which would otherwise have attacked the transporter.

The cure of rheumatism, or pain in the bones, was however accomplished, either by a brew of prickly-ash bark, or by the oil of swallows; and one shudders to read of twenty "quick" swallows, being beaten together with twenty kinds of vegetables, and finished off with butter and wax.

To produce a sweat one drank posset ale with bruised anise-seeds; while night sweats were banished by placing a pan of water under the bed of the patient.

Nightmares were made to trot briskly on their way, in some other direction, by placing the shoes under the bed, soles up.

One fact which is suggestive, as we take our backward look, is that people in the old days apparently did live to the century mark in greater numbers than to-day—sometimes falling short by only a little, sometimes going beyond by quite a bit. In the latter part of the eighteenth century, we find that in one New Hampshire village, there were living at the same time two persons of a

hundred each, and one of one hundred and five years. Among the planters of Londonderry, the average age was eighty years; while many lived to be ninety, and several achieved a hundred years. At the age of eighty, a man of that period walked from Portsmouth to Boston—a matter of sixty-six miles—in one day, and back home the next; and it is evident that the trip was not his undoing, for he lived on thirty-five years longer.

Nor did these hearty males always outlive their consorts, for about this time a man of one hundred and seven still had by his side his girl-wife of ninety-seven. We did not have a system of recording the mortality of children, in those days, but we know that many families counted their children as high as the dozen mark; and that some families numbered up into the twenties; and that such families were often born of one mother and grew to maturity under her care. Whether this longevity and hardihood were because of the efficacy of the old cures we cannot say, but at least they coincided in point of time.

It is interesting to run through the names of some of the ailments of other days. From many of them, we surmise that the real trouble was never known; and that only the surface appearances were given "comfort." In one New England town, between 1735 and 1763, the following maladies proved fatal: King's Evill—a painful disorder of the head; Long Sickness—probably

consumption; Mania; Mortification; Sore Mouth; Strangury; Throat Distemper; Lethargy; Nervous Headache; Schirrus-hardening of gland; Violence; Worms; Decay of Nature; Fever—nervous, putrid and mixed; Gravel and Madnesse. Back in the previous century, "ye stone" was a grievous trouble; also "the purples," "poyson" and "megrun"; and again, in the early eighteen hundreds in New York city, one malady was called "pain in the side" and another "dry belly-ache."

Quite in keeping with the quaintness of the names of these afflictions, were their odd cures. For pain in the breast, the mothers of the old days were advised to wear the skin of a wild-cat on "ye place grieved"; broken bones were treated with the boiled bark of slippery elm "tyed on to ye Joynt"; in case of burning, as late as 1868, the patient was told to apply ice-water, or snow, for a short time, to follow this with a poultice of Indian meal and buttermilk, and, at the end of three days, dress the wound with a salve of beeswax and lard—although wood-soot and lard might do as well. "Butter and flour" was the quick relief for ordinary burns.

The unfortunate, who had succumbed in a faint, was made to drink vinegar, "the sovereignest thing on 'arth for a fainting fit." For the cure of gravel, the sufferer drank white wine, wherein were bruised nettle seeds, or a concoction from the bark of the white elm. "Poysons" gradually

came to have a place in the art (or perhaps better "the experiment") of healing, and the thorn apple, henbane and nightshade were pressed into service for spasmodic affections.

Resuscitative methods deserve some attention, too, for there were many ways in which life, quite despaired of, was revived. A lung fever casualty vas avoided by rubbing the limbs with hot vinegar and laying a cloth, wet with hot vinegar, on he stomach. Another man, apparently passing out from life from the effects of yellow fever, was aved by having his limbs rolled in hot onions, hot mions placed on his feet, and hartshorn held to his nose—and the story tells us that the nervous wife brought almost instant resuscitation by spilling a large quantity of hartshorn into the patient's nose, quite by accident.

In the following method of resuscitation from drowning, we touch some of those beautiful articles of colonial furnishing which lighten any subject, even the gruesome one of ill-health. "While still wrapped in warm blankets, a warming pan"—shining brass, long graceful handle and all—"covered with blankets, should be rubbed across his back. Also, close one nostril and the mouth, and introduce the pipe of a bellows into the other nostril"—this time shining brass and tooled leather meet our memory.

Warts, then as now, troubled the human race; and then, as now, succumbed to many mystic treat-



ments. We are all familiar with some remedy for the removal of these pests of the flesh, such as "tying around with a string and burying the string," "rubbing the wart with a used dish cloth and hiding the cloth," and other famous tricks; and yet in the old days, there were still more. One old lady tells of laying a little ball of cobwebs on a wart on her hand and then setting fire to it; she endured the pain, until it became unbearable, and then flung the flaming mass from her—the wart departing with it. Another, a child, was taught to use heat in another way for the removal of this unsightly gift to man. She "het a needle and run them through." Still another accepted the kindly offer of her old grandfather and stuck a separate pin into each of thirty-six offences which she carried on one hand, and then placed the pins in a row up her grandfather's sleeve, for he assured her that he "weren't none afraid of ketching 'em."

Bowel troubles were met with long drinks of crust coffee, an old farm remedy still used by the faithful followers of old ways; and, surely, if one may judge from one cupful of this delightful beverage, served but recently in a china cup of about the year eighteen hundred, those who were afflicted with the summer complaint must have found the cure most palatable. Rice, parched until it was perfectly brown, and then boiled and eaten slowly, was another bowel "comforter";

and a cathartic, made from the bark of the butternut tree, was found to be "neither gripping nor exhausting." This same butternut remedy was also one of the best antidotes for the bite of the rattle-snake, although the leaves and bark of the white ash have always held first place for those dreaded emergencies. Even the birds carry the leaves of the white ash to cover over their eggs, when the crawling enemy is seen in the neighborhood, since the rattler always avoids the white ash.

Cobwebs, a well-known "stringent," were also gathered quickly from the dark corners of shed, or garret, and placed on a fresh cut, to stop the bleeding; and there were no tiresome hygiene specialists to cry out against the germs which hung to those lacy festoons. Some of the farmers collected and kept on hand a supply of puff-balls, their dry, dusty centers being another effective quencher of blood.

Palsy was comforted with a "powder of mustard, betony leaves and sugar, eaten every morning," or a concoction of lavendar; but for palsy, or even apoplexy, "the strong smell of a fox is exceeding sovereign."

Salt pork, in all its greasy bulk, held perhaps first place as universal pacifier and purifier. No matter how far we may travel, or how many old cellars we may visit, we shall always find the powdering tub, or pork barrel, rearing its head among the other containers. Hand-coopered, strong in sinew, and proof against decaying years through the efficacy of its own contents, it was a never failing well of virtue. If the farmer ran a splinter under his thumb-nail, "Mother" raced to the powdering tub and cut off a piece large enough to bind the wounded thumb-tip; if the baby's throat was inflamed, he went to bed with a slice packed about his neck, although it was not a pleasant, or a sweet-smelling companion; if the awkward, growing son let slip his ax, there was another hurried visit to the cellar, and son would not walk again, until the salt pork had accomplished its heroic work of "drawing" on the wound.

Another remedy, or disinfectant, for those dreaded accidents which have befallen the wood-chopper through the centuries, was the application of human urine, that homely cure which has saved many a life through the years.

In the spring, the mind of the housewife turned to simples and bitters, to be ready with "relief and benefit" for all who might need them. Those famous old concoctions which made the children hide, rebel and then squirm in the hands of a relentless fate—how their memory lingers! As surely as the first golden dandelions showed their heads above ground, that spring tonic was prepared, and while it varied somewhat in form, it never varied in the qualities of bitterness and

woe. Sulphur and molasses, or "treacle and molasses" was perhaps the most famous; sage and East India molasses a close second; with rhubarb and dandelions, properly embittered, and brewed in a brass kettle, following closely behind.

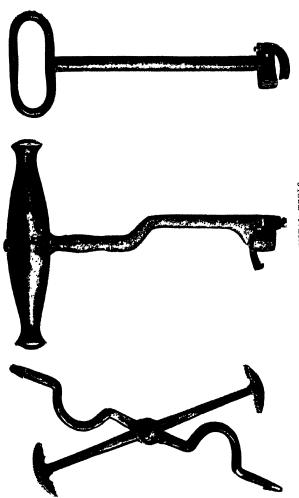
Dandelion wine, quite a different article, was a favorite among the older folk, who could decide for themselves, for it tasted so good, and "sipped so easy"; and many a child picked a winding path across a meadow glowing with the golden blossoms, and left behind a clear green trail, that granther or granny might be "built up."

In some sections a cup of hot maple syrup rivaled sulphur and molasses as a spring specific, and this was surely the exception to the rule of bitterness and woe. In addition to its virtue for man, it held virtue for beast, as well, and Dobbin had his dose each spring, for "it took the shagginess out of the hair and gave a healthy glow."

Then there were those palatable old bark drinks, "Five," "Seven" and "Nine" which were good, "come March and April." "Nine" was made of "hemlock, black birch and pine, wintergreen, sassafras and sarsaparilla, and ginseng, ginger and the poetic spikenard," its virtue lying in its threes.

The following blood medicine, used as a spring purifier, has its æsthetic suggestion:

1/4 lb. burdock root
" " sarsaparilla root



PRIMITIVE DENTAL TOOLS

"Pelican," an importation; "Vulture's Talon," a development of the "pelican"; early American instrument ment made from door-key

1/4 lb. yellow root

" " dandelion root

" spikenard root

" red clover blossoms

1 handful hops.

These were stewed in four quarts of water, until all the strength was extracted; then strained and enough sugar added to taste, and stewed down to a syrup, when one half pint of brandy finished it off and made it ready for a tablespoon dose, three times a day.

These were not the only doses which were concocted in the spring for, once they had their hands in, it was easier for the housewives to go on and prepare for future emergencies, than to stop. Elder leaves were boiled in milk for possible ague sores; and the "Falling Evil" was prepared for, by drying to powder in an oven a female mole, for the use of the menfolks; and a male mole, for the use of the womenfolks, to be taken internally, should any succumb to this malady. A sleep producer was made of powdered saffron, lettuce seed and poppy seed, all mixed together in woman's milk, and made ready to be bound to the temples.

It should be remembered, too, that the really old cures were not administered by the spoonful, nor always at regular intervals, but were generally taken by the cupful, generously and thoroughly, making the taking of these spring tonics a real event in the life of the family.

One popular form of treatment for many troubles was blistering. The Indians accomplished it by applying punk, or touchwood, to the skin; while the white man used the Spanish fly, which was dried and powdered for this purpose. George Washington was "purged, bled and blistered" for his last sickness; and he was one of the fortunates, who could afford the expensive remedy, for the Spanish fly, in its raw form, cost from five to sixteen dollars a pound. In 1806 some one, realizing the blessing from which the poor were cut off, did some experimenting on his own account and published this cheaper formula in one of the farmers' almanacks: "Potato bugs, swept off the vines into a milk pan, killed in vinegar, dried in the sun. These animals are the only thing which will draw a real blister, except the Spanish fly."

Another treatment was that of bleeding, or

Another treatment was that of bleeding, or blood letting. There have been cases, where quick bleeding has brought happy results, such as the restoring of both sight and hearing, apparently destroyed by a heavy fall; but the wholesale bleeding of the early nineteenth century became almost a mania and was undoubtedly responsible for much loss of life. Cupping and bleeding were more often performed by the barber, who was a specialist in this form of surgery, than by the physician; and some of the old barber signs bore the legend of "cupper and leecher." The Indians were also proficient in the art of blood letting and

did their cupping by placing a buffalo horn at the center of the forehead, the temples, crown of the head, or on the arm, and sucking the air through the end of the horn until the flesh was numbed, when they made a slight incision. Blood letting continued in vogue for many years, and was finally accomplished by the application of a blood sucker, or leech, at the temple—a cure which, to the human family, was unquestionably worse than the disease.

Fevers came from many causes and went again from even more cures—when the patient was for-tunate enough to recover. Fevers—putrid, nervous, mixed, scarlet, spotted and yellow-seem to have been looked upon as emanating more from the devil himself, than any of the other distempers which befell mankind; for, as we shall see later, they were treated with less logic and more superstition. To be sure, Peruvian bark-one of the earliest remedies, but achieving its greatest popularity during the eighteenth century—was a much-used fever specific. Dr. Benjamin Rush of Philadelphia and Dr. Physick, leading authorities in 1793, bled their patients freely for yellow fever, and gave hearty doses of rhubarb, calomel and jalap; using also the much feared coldr water application, as well as cooling drinks. Much later, however, men, women and children were urged to smoke cigars, as a preventive of fever, and to chew and wear in their shoes the friendly garlic. In every home gunpowder, niter and tobacco were kept burning, during fever epidemics, and vinegar was sprinkled about, while many carried smelling bottles of the latter in their pockets—"thieves vinegar" being efficacious for this purpose. Another safeguard was the carrying about of tarred rope in the pocket.

Many were the deaths which resulted from these really terrible epidemics and the proportion of the inhabitants which was swept away in some of the villages and towns, was appalling. One poor family in a New England town was entirely wiped out within the space of thirty-three days, with the exception of the father—six children and the mother dying from a fever, either not understood, or neglected. To-day their tiny white stones stand in a row beneath hugh sheltering pines, a mute bit of testimony to the unequal fight against disease in the old days.

Cholera was another of the dreaded plagues which visited the country before it was ready to cope with them; and below is given the effort of one doctor in 1868 to vanquish it. So simply the cure reads, and so swiftly is one wafted, on reading the latter part of it, to the shady depths of cool woods and the grassy borders around sunwarmed hay barns, that one questions its power in a contest with that havoc-working disease. "Cholera. Gum camphor, laudanum, red pepper, one ounce each; cinnamon, cedar, hemlock and

spearmint, one fourth of an ounce each; alcohol twelve ounces."

The use of cold water for fever by Dr. Rush was a tremendous innovation and one which was still strongly disbelieved in, as late as 1875, and even more recently. Our forefathers came from Europe with a prejudice against cold water for bathing, drinking, or treatment of disease. The Plymouth Pilgrims were only persuaded to use it as a beverage after Governor Bradford had courageously tested its effect and found that it not only did not poison, but seemed invigorating. As early as 1716 Cotton Mather was advocating the use of cold water for the relief of various maladies, but advocating it before a disapproving audience.

In 1795 we find sea bathing suggested as a cure for goiters, with an incidental diet of "salted fish and vegetable acid, particularly cyder, which has also been found beneficial to reduce these tumors."

Our "ear, eye, nose and throat" specialists of to-day have perhaps traveled as far along the medical trail, as any of their brothers. When we realize how entirely lacking were the old leeches in knowledge of these delicate parts of the head, we wonder, not so much at the methods which they used, as at the fact that they did not do more damage than we have record of. Deafness was treated by having "roasted hedge-hog fat" dropped in the ears for a week, or more, well covered with "black wooll." One cure urged

for the clarifying of the sight was composed of "elicampaine, fennel and anniseed mixed with good Nants brandy" dried, and of this a "pretty quantity" was to be taken morning and evening. Another was "a strong concoction of camomile boiled in new milk—bathe eyes several times a day as warm as possible. Persons nearly blind have been cured by persevering." Still another "sure cure" for inflammation brings us up delightfully into the sunlit places, where nature once more has a hand; and where the old time money plays its humble part: "Eye Water:—one half teaspoon salt, one teaspoon powdered sugar, one quart clean snow-water and as much white vitriol as can be heaped on a sixpence. Drop in eye." Again, the man with "whiteness in his eyes" was anointed with the gall of a fish.

The throat, too, had its special reliefs and benefits. One of the simplest of these was slippery elm which, when made into poultices, was famous for its powers to relieve throat and chest ailments; and raw onion poultices have saved the lives of persons, apparently dying from throat congestions. Hoarseness was sometimes treated with roasted figs, stuffed with ginger; and sometimes with "one drachm fresh scraped horse-radish root, infused with four ounces of water in a close vessel for two hours, made into a syrup with double weight of sugar." "Consumptive coffs" were cured by drinking "the warm milk of a red cow in shredded

horehorn and a concoction of lignum vitæ." The crowning agony of all throat disorders, quinsy, was dosed with a drink of mouse-ear steeped in ale. A stone was then rubbed, where a hog had rubbed it, and then rubbed on the swelling.

Blood spitting from inward bruises was stopped by a drink of ale, in which were put pitch and spermaceti. "Black currants," says one old man, "yes, them's awful nice for sore mouth and throat; and there's nothing will set you up again so wonderful quick as sassaparilla, or maybe blackberry cordial."

When we come to the subject of teeth, we do veritably descend into the morasses. Force seems to have been the best understood prescription, and this force was administered by the blacksmith, quite as often as by the doctor. At the beginning of the eighteen hundreds, when teeth were extracted, the patient's head was held to the table, while the operation was being performed. By 1830, a step in advance had been made and the patient was allowed to sit on the floor with head erect, but firmly caught between the knees of the doctor, who did the pulling "with a cant-hook, or whatever it was called—large enough to pull a pine stump," according to one reminiscent victim.

As a preventive of "teeth ache," we find that many people put their trust in the cutting of their finger-nails on Friday; and one old man told how

he kept himself immune from this trouble, by biting into the backbone of a black snake-and this within the last hundred years. When preventives were neglected, cures were sought for, and the following comes down to us, tucked in between the recipes in an old Albany cook-book:-"On going to bed, put a mashed garlic on the ball of the thumb, as you would any common plaster; it is an effective cure for tooth ache and has never failed." In New York city, in 1868, a homemade tooth powder was concocted, which was surely a curious combination of properties. In carefully designated quantities, the following were to be "pulverized and perfectly mixed and used from two to three times a week": "Peruvian bark, gum myrrh, nut galls, cuttle fish bone, chloride of lime, and oil of Bergamot." Perhaps, if the white man had also copied his Indian neighbor in the care of his childrens' teeth, he would have had less suffering. The Indian women systematically threw to the children bones and tough ligaments, on which the little ones gnawed with delight, thus saving themselves much later distress.

Beauty parlor preparations of the old days were entirely home-made; and one of the simplest methods of whitening the complexion, which was then considered desirable, was bathing in milk, or cream. Some young ladies are quantities of unground cloves for this purpose, while others wore

heavy, quilted "pumpkin" hoods, while cooking by the fire, so that they might bleach their faces. Back in earlier days, when high color was a requisite for beauty of face, rose water and white wheat were so blended that they would bring back the complexion after illness. Those unfortunates whose hair began to leave them, before they were through with the need for it, applied southernwood, mixed with oil of radishes. Whether the hair came back, or not, we do not hear.

Many were the specifics for headache, or migraine. Almost, one would feel benefitted simply to hear the component parts of such doses for "comforting the head and brain" as, "rosemary and sage infused in good Canary"; "mugwort and sage, camomel and gentian, boiled in honey."

"Nosing-in the spring of the year" was warranted in a short time to open the brain and give some refreshment; and this, oh-so-wise advice, came across from England as far back as 1644.

When it came to madness, we find "a few seeds of spurge" being prescribed, dieting being advocated, and drink limited to only that liquor which had been made red through boiling with St.-John's-wort. Another simple expedient for "frenzy" was the squirting of beet juice into the nostrils; and drinking posset ale, in which violet leaves and lettuce had been boiled.

It would be an impossible task to cover the

field of old salves and ointments with anything like real thoroughness, for, since time began, the making of salves seems to have been, not only the duty, but the great delight of women, many of them having an almost uncanny knowledge, or intuition, regarding the value of salve ingredients. Mutton tallow rather heads the list in simplicity and popularity and this was the old cure for chapped hands and roughened skin; skunk fat made an "ointment for the pain of swelling joynts"; cerate was a salve made of wax and oil, although by some it is described as being "an unctuous preparation of wax, rosin and lard, stiffer than an ointment." The old fashioned mustard plaster was made of "ground mustard and ground flax-seed, mixed together with water—to prevent sticking, use hog's lard."

The following liniment for wounds smacks, perhaps as strongly as any, of the old-fashioned

kitchen and its endless resources:

1 pint strong vinegar

1 pint soft soap

a tablespoon of sal nitre

a handful of salt

Quicksilver beaten with various other substances made the ointment for the itch. For a poultice for general purposes the skin of an egg was brought into use, or the white of an egg and white pitch; and even to-day in the country, when one is unfortunate enough to come into contact with a stinging insect, one spits in the dust and forms the mud poultice, which knows no equal.

An Albany housewife leaves the following recipe for the cure of felon or whitlow, as she made it nearly a century and a quarter ago in her great open chimney place. "Take a piece of rock salt about the size of a butternut, wrap it in a green cabbage leaf, lay it in hot embers and cover as you would to roast an onion. After twenty minutes take it out and powder it fine. Mix the powdered salt with so much hard soap that it will make a salve (be sure the soap smells of turpentine) apply the salve to the felon and in a few hours it will destroy all pain."

"Like cures like" is the old saying on which one of the modern schools of medicine is said to be founded; and among the Indians we find the use of certain vegetable medicines employed, by reason of their resemblance to the disorder, or the part affected. A plant with a worm-like stem is given as vermifuge; while one that has hair-like processes is used to cure baldness. As far back as the seventeenth century, we find a similar belief among our white forefathers. Sweet milk was tinctured with enough saltpeter to make it brackish in taste and then saffron in "a fine linnen clout" was rubbed into it, until the milk became a brilliant yellow. This was given as a cure for the notoriously yellow jaundice, or "jaunders."

Thus, in many and marvelous ways, have the ailments of the human race been treated,—plagues, "purples" and manias and kindred distempers calling forth equally astounding remedies. Men and women have suffered pain too terrible to describe, all unconscious that the time was coming when, through anæsthesia, such suffering would be largely unnecessary. It is hard to believe that in the latter part of the last century anæsthetics were not generally used, even for the most difficult child-births; and that in our own present century women of the intelligent middle classes have looked with unyielding fear and disapproval upon this method of relief.

Anæsthesia was not discovered until 1846, and like all new things, it took many years to win the confidence of the people, even doctors having to be won over to it. Once again it is interesting to find the New England farmer's wife, resourceful as ever, brass kettle in hand, finding a way to deaden pain on one unhappy occasion, along about the eighteen eighties. A farm hand was brought into this woman's kitchen with a broken leg and he refused to let any one touch the afflicted member because of the pain. Swiftly the brass kettle was swung into place; and, in less time than one would imagine, a fine strong brew of tobacco was being served to the unwary patient. Dose after dose was administered, while the

would-be helpers stood around, shifting from foot to foot, waiting for the numbing process to take effect. When the patient grew so deathly sick that he could no longer protest, they yanked the bone back into place.

Crude as this method seems, it was not more crude than those operations which were performed on entirely conscious persons, held to the table while the surgeon's knife was applied—and this only thirty years before.

The field of obstetrics, or midwifery found its practitioners almost entirely among the old women of the country. When we realize that to get one's doctor's degree at the University of Pennsylvania, it was not necessary, until 1843, to take a course in the science of midwifery, we can understand why the most important of women's necessities was left so long to unscientific hands. Right here, one of the brightest spots appears along our greatly shaded trail. Through the years women have been going to the bedsides of their neighbors, often recent neighbors, to help in delivering their babies. Worn out with her day of farm work, many a mother of a large family has responded at midnight, without a murmur, to minister to a friend in need, and attended her for a fortnight with no thought of remuneration. When Lincoln was born, the "granny woman" was sent for; and "granny women" under other names have delivered probably a large proportion of our men and women, without the aid of a doctor.

"Watcher's night" is an old and well known expression in Vermont; but not to Vermont has the kindliness of neighbors at a sickbed been limited, and it is really only within very recent years that the trained nurse, procurable for money, has been known. Inefficient, perhaps, these volunteers were, but they ministered with a devotion which has never been surpassed by hired assistants, and seldom equalled.

The study of old cures keeps us so much among the women of the home, that it might easily be imagined that early medicine lay entirely in their hands, were it not for the picture which rises before us of the old-fashioned country doctor. It is safe to say that no figure held so high a place in the hearts of the people in the years gone by, nor lingers so brightly in the memory of each of us to-day, as the family doctor of our particular countryside. Much has been written of him, but probably no one will ever be able to write adequately of those untold and beautiful services, which endeared him to the people of his locality. Meeting all kinds of life and living, he was generally a philosopher of a sort, and giving always and receiving little, he grew in soul and understanding. Holding no brief for special creeds, he was less hampered than the parson, in his dealings

with the people as a whole; and, going among them day by day in their hours of sorrow, he reached a place in their hearts, which the representative of the church could never know. The parson was respected while the doctor was loved.

Often, with no one to assist him in pounding the herbs, which he himself had gathered, the country doctor spent the time between long trips over muddy roads, crushing the tough, resisting roots in his iron, or bell-metal mortar; or brewing in smoke-blackened kettles such remedies as he had learned, not in a medical school, but in the office of some older doctor, whose apprentice he had been as a youth. Often, too, he traveled for weeks, breaking snowdrifts day after day, to care for some one whose family could not for years, if ever, pay for his services. And then, perhaps, there was the forlorn funeral which every country doctor felt obliged to attend.

Exceptions, of course, there may have been to this picture of the country doctor and his mudsplashed chaise; and, later, the side-sagged buggy may not always have borne a paragon of the virtues over the long winding roads; but it is safe to believe that the country-doctor profession held fewer scamps, than almost any other.

Fees in the old days were largely in the hands of the patients themselves, few of the old-fashioned doctors having the time, or the inclination, to bother themselves with bills. Their fees were small and seldom called in, except when actually needed—and then often with apologies. Back in the seventeenth century, there seems to have been an even higher standard of ethics, where remuneration was concerned; an understanding being established that, unless a cure were effected, no fee whatever should be forthcoming. Thus:

"No man can with a good conscience take a fee or a reward, before ye partie receive benefit apparent: and then he is not to demand anything, but what God shall putt into the heart of the partie to give him. And he is not to refuse anything, that shall be given him, for it commes from God.

"A man is not to neglect that partie, to whom he hath once ministered, but to visit him at least once a day, and to meddle with no more, than he can well attend. In so doeing he shall discharge a good Conscience before God and Man."



OXEN WITH TYPICAL YOKE

## VI: Pioneer Hides, Hoofs and Feathers

It is unhappily a fact that we humans have given the animals of early American days too little honor. Much has been written of the scarcity of cattle and horses among the first settlers, and the resultant suffering, but too little has been said of the days when the domestic animals were the backbone of pioneer activities.

Oxen were the power of the land and horses the "lightning express." Cattle gave leather for leggings, jerkins, small clothes, caps and shoes; they gave grease for tallow candles, horns for powder, tough ligaments for thongs, hides for "fur trunks," knapsacks, chair-bottoms, water-bottles and numberless other necessities. The hog family had other usefulness than that of producing pork; and the sheep on the hillsides, other business than that of delivering juicy chops at the butcher's call; while, without geese to furnish fillings for feather-beds and pillows, there would have been more troubled dreams on the old corded beds. To the pioneer, his cattle and his horse were vital factors; and to lose one of these animals through death, or theft, was an exceedingly serious matter, for such a loss might mean lack of light, food, warmth, or communication with his fellow men, for many months.

Even as late as 1792, we find the New Hampshire legislature passing the following act and, by its very harshness, we may sense the dependence of a man upon his dumb animals in those hard days:

That, whenever any person, by due course of law, shall hereafter be convicted of stealing any horse or horses; mule, or mules; neat cattle, or sheep, every such person shall be marked with a line of India-ink, well and deeply inserted, above the eyebrows, from the hair of the temple on the one side, to the hair of the temple on the other side of the forehead; and by a line in the same manner inserted, from the centre of the line aforesaid to the end of the nose, on the most prominent part thereof, on the first conviction.

For this bit of gruesome artistry the sheriff received six shillings, while the same act further decreed that he might go on through "shackling in the publick gaols" to "whipping—not exceeding one hundred stripes," and finally to setting the thief "on the gallows, with a rope about his neck, not exceeding two hours."

If such stringent laws were found necessary, when the country was a century and a half old, how much more important must have been the domestic animals in its early beginnings!

Few people realize the true significance of the "common" of the early New England villages, or that its initial usefulness was as a pasture for

live-stock. If a town was hewn out of the wilderness, the first clearing had to be given over to pasturage; or, if open land were chosen for the future town, the best of the grazing land became the animals' portion. Naturally that portion must be within the circle of defending agencies against natural marauders, so the first homes were placed about it. "Commons," these acres became, in very truth, for each settler had his legal share in them; but they were set apart under various names, such as "glebe land," "city dale lotts," and "town plott."

The "lotting of the lotts" was determined by "pitching," in some localities; by assignment, in others; and by choice, according to a man's means, in others. In some cases the land continued to be sold, not as acres, but as "cow-commons," for many generations; while fractions of these same lands were known as sheep, or goat, commons. Nor was it only back in the sixteen hundreds, that the animals were allowed this front row privilege, for some towns were still pasturing their cows and sheep and geese on the commons as late as 1800; and in many towns, cows continued to graze on the town green, until the nineteenth century was well along in years.

In some communities, the communal pasture land was outside of the village proper; and a shepherd took the cattle to pasture a half hour before sunrise each day, announcing his arrival and his return with his charges before sunset, by the winding of his horn. What a frieze of motion and color must have been that long line of cattle, sheep, and swine, through the leafy trails; and what a patter of cloven feet on the rough rocks and unresisting ferns!

Thus were the humble animals responsible for what are to-day the beauty spots of many a village and town; and they gave employment, also, to many a man and boy, who was glad of the few pence a day, which the care of these animals brought him. Under the names of "sheep-herd," "swine-herd," "cow-herd," and "calf-keeper," these trustworthy persons practiced their vigilance and, throughout the grazing season, guarded those possessions which meant comfort, wealth and even life, to their owners.

Also there was the hog reeve, a well known officer, whose business it was to look after loose hogs, see to the rings in their noses, insist upon their proper marking, and contrive that they should do no damage to the village crops.

The "pound-keeper" was a busy man, in the days when the common was no longer the accepted grazing place; or in those towns where community care of the stock was not in vogue. The pound was an actual jail for offending four-footers. Attached to an old stone wall, on an all but forgotten road in New Hampshire, one may still see one of these animal jails—a space twenty

feet square, enclosed by a stone wall as high as a man's head.

To allow the animals to run at large was still the custom in one New York village, until 1824, when the trustees ordained that no neat cattle. horses, sheep, swine, or geese should longer wander thus; and, to discourage the habit, a fine of fifty cents was made for each offending "neat creature," or horse, and twelve and a half cents an hour for each straying goose. In addition to this, the poundkeeper came in for a like fee and the cost of forage, during detainment; and, if the owner did not claim his animal at once, it was posted and sold at auction within two days. Then, as if the townfathers had thought suddenly of the quiet evening hour and their bowls of bread and milk, an exception was made in favor of milch cows; so the sweet-breathed kine were permitted to run at large from the first of May, until the fifteenth of November. The broad street of that village used to have picket fences before all its dooryards-today, there are none.

If there is any animal which can rightly be placed among the founders of our country, that animal is the ox. Little known by the average American to-day, and laughed at for its clumsiness when met occasionally on the highway, the ox-team is still, to the observing, one of the finest sights of the rural countrysides. Lurching from side to side, the great bodies teeter on their tiny

feet, but the loads which oxen can draw are almost unbelievable.

The first neat cattle were brought into this country from England in 1633; and immediately formed a large part of their owners' wealth. When we consider the power of these beasts, and its manifold application, it is not hard to understand why this is so.

The value of an ox, over a horse, was tremendous. It is said that, because of the greater expense of harness, outfitting and so forth, a man in the early eighteen hundreds could maintain twelve oxen, for the same price that he could keep one horse; while the drawing power of the ox was several times that of his swifter brother; and, as a matter of fact, in those days of rough roads, a horse had little opportunity to exhibit his speed.

The oxen cleared the forest lands, dragged out boulders and carried them here and there for stone walls, and broke the virgin soil and harrowed it for the first planting, with clumsy wooden ploughs and harrows. When in the eighteen hundreds, rails were being laid for the first engines and cars, the heavy work was all done by oxen; and they were also employed for crushing stone, as it was soon discovered that four heavy oxen could crush as much stone with their feet, as sixteen men could crush with their hammers in the same amount of time.

There seems to have been a good reason why

the oxen of the seventeenth century were exceptionally large and strong. The calves were allowed to run wild with the cows and sucked at their pleasure, thus growing stronger than calves which had been weaned early; also, to encourage the breeding of fine oxen, prizes were offered.

An "ox-handy" pair of steers was usually so docile and well broken that a boy of seven, or eight, could drive them to the plough all day long—at a shilling a day; while one child, of less than five, is said to have driven a team of six oxen from morning until night, while his father ploughed a rocky pasture.

The highways rang to the "Gee" and "Haw" of the ox-team drivers, far more than it did to the "Gid-dap" of Dobbin's driver. In 1791 the proportion of horses to cattle on the highways was as one to twenty; in 1805 oxen were far more numerous than horses; and in 1816 they were bringing the munificent sum of \$75 a pair, without the yoke and bows.

"Father was always against my overworking the oxen," says an old man, who was an ox driver as a boy. "Why, some of the neighbors forced their oxen so hard they split the bows, but I was always careful not to work 'em so as to shrink 'em."

If a barn, or house, were to be moved, a team of oxen was brought in for the work; if snow-filled roads were to be broken out, the oxen were again

of every thriving family in the early days. She was led through newly blazed trails to follow the family fortunes, while highboys and four-post bedsteads were left behind in the abandoned homes. Many a pioneer took his family into the wilderness, chopped the trees, built the new cabin, settled the family in a single room with skins for beds, a cross-section of a tree for a chair, and a homespun blanket for a door against the cold and the wolves, and then went back to the settlement. For what? Not for the precious mahogany heirlooms, which came from the old country with him, but for old Bossy cow, left in a neighbor's care; or the new Bossy, who was to be the pet of the family, as well as provider of milk, butter, cheese, curds and whey, and probably dragger of the plough. All this in life; and, in death, a winter's supply of meat, clothing and shoes, harness and straps.

The points of the cow were as carefully considered, as those of the ox.

"Well," said an old lady, who was buying herself a new cow, "this one's horns be full of butter. I'll take her." It was the transparency of the horns, that was essential for butter production. Large milk veins were assiduously sought for; and if forked milk veins were discovered "with two holes on each side," that cow would be an exceptional milker, especially if she had "a well spread bag, a yellow skin and four good teats,

standing well apart." Her tail should be slim, her eye a bright hazel, her face long and lean, her horns flat and not too large at the base, and above all, "a pretty large sack, with room for her own dinner."

And a good cowman would know equally well the promising points in "a heifer yearling."

When the question of the horse and its place in the early history of our country, comes up for consideration, the touch of romance is introduced. To be sure, horses were used in the plough-tugs, dragged heavy loads, and often carried on their backs their masters, with their wives and babies on the pillions behind—and well-filled saddle bags, to boot—but they had many romantic uses, as well. One could not go a-courting behind an ox with the same zest that one would feel, if galloping horseback through the blazed alleys of the forests, on the way to one's beloved; and, indeed, merely riding bareback to a neighbor's, a mile or two away, is romance, if you have been cooped up behind snowdrifts for weeks.

The horse in some sections was the sign of manhood. Within the last quarter of a century, one old New York State family sold, for a fraction of its real value, a lovely old Sheraton sideboard, so that young Reuben, just coming "of age," might have his own horse and buggy and all that the diversion of "buggy riding" might mean to future years. If a young man had a horse, he was free of the farm when the chores were done and could go out on the roads and meet other blades and "race horses." In 1824 this habit, of a summer evening, was so general—and apparently so troublesome in one village—that the newspapers announced a decree of the town fathers that there should be no more "running of horses within eighty rods of the village pump."

As a means to a swift escape, the horse was the only agent in the early days; and many a man awakened to find his horse gone from the barn of a morning—to be found, perhaps days or weeks later, tied to a fence-post, or a tree, eighty or ninety miles from home; for, having served the thief in his escape, the horse was better abandoned than retained. For the purpose of rounding up such thieves, protective associations were formed among the men of the towns and outlying farms.

In such ways did individuals look after the safe-keeping of their animals; but when, in 1700, the export of horses to the West Indies became a paying business and "horse coursers" traveled over and scoured the country for horses, the seaport towns of Massachusetts were all provided with toll-books, for "the better preventing the stealing of horses and horse kind and clandestinely conveying them away."

In 1802 a Vermont paper carried the following notice:

## -FIFTY DOLLARS REWARD-

Stolen from the subscriber on the 16th of September last, a bright bay MARE. The thief is a large dark complexion man, with short black hair, by the name of Moses Bartlett. Whoever will take up said thief and secure him in any gaol of the United States, and give information to the subscriber shall receive the above reward. The above Thief went from this town on the night of the 7th instant.

February 8, 1802

## Jacob Howe Gershom Bartlett.

N. B. The Printers through the United States are requested to insert the above Advertisement in their papers for humanity sake, that a noted thief may be brought to justice.

In 1819 the following description of a good horse was published in "The Old Farmer's Almanack."

Choice of a horse. Select one of a cheerful, animated countenance, small head, full eye, beaming fire and spirit, small ears nicely set on, possessing quick characteristic vibrations, wide in the throat, a large distended nostril, small long neck, projecting from the shoulders in the curvilinear or rainbow, thin on the withers, straight back and short, broad and strong across the loins, a breech gently sloping, the tail a little drooping in the carriage, short in the couple and pretty full in the quarters, round carcass, not heavy in the chest, short straight legs, fetlock short, the joints even, and possessing delicate tegu-

ments hoofs, the concavity of the sole corresponding, standing upright on his limbs, a little wide behind, exposing the swarn and gaskin in movement. His height should be full fifteen hands.

Sheep, although counted as one-fifth of a cow in the allotment of common pasturage, surely held no fifth place in importance in the lives of the colonists and their progeny. Providing wool, the chief material for clothing, this animal suggests the uses of the beautiful old spinning wheels and ancient handlooms. Pantaloons, great coats, mufflers, leggings, caps and mittens, were made from the fleece of sheep; and also, dresses, shawls, bonnets, stockings, blankets for horse and man, and other articles, too numerous to mention.

There was nothing so "sovereign" for chapped hands as mutton tallow; and nothing better for preserving boots, than this same mutton grease. Mutton chops and legs of lamb need no word spoken for their popularity, but there were many old lamb and mutton dishes concocted by the chimney place housewives, which are unknown in the modern kitchen. "Head and pluck," the head and heart of a sheep properly brewed and stewed, was one of them; and "pickled sheeps' tongues," made from the tongues of a dozen little grazers, was another of these delicacies.

Although the skin of the colonial hog was as much used, then, as now; and small boys, we are

told, collected hog-bristles at the "killing" and sold them, in 1793, for thirty-three cents a pound; still this animal was considered chiefly as a matter of food. That the privilege of keeping hogs was under dispute at one time is shown by the following announcement, dated 1819.

The Supreme Judicial Court at Taunton in July last decided that the poor man might not only keep a swine and fat a swine, but also might kill and eat him, free from attachment.

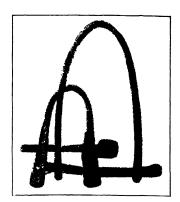
The salt pork barrel was a necessity in the cellar of every farmhouse, both for food and medicinal purposes; while the endless variety of recipes for cooking pork would fill a large book. The recipe for making sausage smacks of posy gardens, by such touches as "sweet marjoram passed through a fine sieve," and "just a pinch of summer savory." The pig himself was quite forgotten in the appearance of "pork, collared and soused," or "ham with six tongues," but he did claim some personality again, when he appeared as "a whole hog's head with carrots in the mouth, and pendants in the ears."

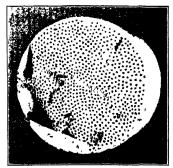
Just to be a goose in earlier times was something to be proud of, for geese did their considerable part in making the hard pioneer life bearable and the easy life more luxurious. Sleeping on our modern mattresses would have been considered a hardship by the advocates of feather-beds—and

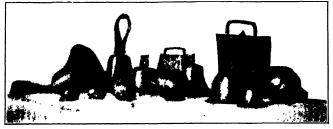
everybody was that, in the old days. The more feather-beds a housewife had, the better housewife she was considered. There were the feather-beds for the family, as a matter of course; and after that, caste was established by the number and grades of feather-beds which one possessed. For the itinerant peddler and his like, third class; for the visiting soap-maker, candle-maker, and their like, second class; and the prize article, which was ever waiting to envelope the real guest, first class! The turkey, the owl, the hen and the hawk all did their share toward helping the human frame to a good night's rest, but none of them equalled the goose for this work.

If plucked in the spring of the year, the live goose feathers were light and elastic and in no danger of matting; and many were the ways which the women devised, for capturing and holding the squawking fowl, during the plucking. Some sat in the barn with the long neck and head held firmly under the arm, while they deftly plucked the soft feathers from the breast, back and sides. Some, who dreaded the pecking of the restless goose, pulled a heavy woolen stocking over its head; and some had especially woven baskets, into which the goose's head and neck were inserted. Twice, thrice, or even four times a year, the feathers might be taken from the goose; and from four pickings, the yield was approximately three-fourths of a pound. Only once, however,









RELICS FROM OLD BARNS

Horse poke; "ties" and "tethers"; cowhide grain-sifter; sleighhells and cow-bells was the goose called upon to yield its crop of quill pens.

The worst thing about this bird is its incessant tongue-wagging—but this is the very nature of the creature. Flocks of geese wandered about, at large, in many of the towns, and made day and night hideous with their noise, as they clacked the hours away.

Wild pigeons were as plentiful as the grains of sand on the seashore; and one old historian describes their numbers in the following striking manner:

"They joined nest to nest, and tree to tree by their nests, many miles together, on the pine trees." This was in 1741. Until as late as 1870 they were still seen in large flocks, "not every year, but during the beechnut year, which is supposed to come every seven years." It is a long time now, since even one pair has been sighted. The extermination of these birds is one of the sorrows and shames of our country. Found in such numbers, however, it was perhaps only natural that they should seem to the early settlers a godsend in the food line, as, indeed, they were; and that they should pluck them off the low branches of the trees at night, with slip-nooses on the ends of poles; or gather them in, by the hundred, in great cord and rope nets, made for the purpose. One of these nets, measuring two and a half yards, by four and a half yards, still testifies to the

wholesale slaughter, which these rarely beautiful birds invited.

It is to the animals of the olden times and the uses to which they were put, that we owe many of our quaint keepsakes. Some of the massive old ox-yokes and their slenderly formed bows are works of art in the nicety of their making. These were either made by itinerant yoke-makers, or shaved and whittled out by the farmer, himself, at the fireside in long winter evenings.

Horses, too, had their wooden necklaces, since the hames in the earlier days were formed of uncovered wood; and, when a horse had developed the habit of jumping his pasture wall, he was initiated into the hardship of a poke. Heavy and cumbersome, with a long staff which prevented the animal's jumping, these pokes were yet interesting in their formation, with their whittled parts, and hard wood pins and their inserts of leather.

The cow and the sheep, the pig and the goose, each had a special kind of poke, that of the goose being sometimes nothing more than a shingle with a hole in it, or a crooked branch.

Those that were used for a long time acquired a lovely lustre, where the natural grease of the animal was well rubbed into them. Some were heavy; some were light and simply made of fitted pieces, which slipped into place and held against all strain.

"Ties," "tethers," "tedders" and "fetlocks," were some of the names, given to the wooden contrivances which were fastened about the animal's feet, when it was tied to a tree, or post, for grazing. These are heavier than the poke, but often confused with it.

While vokes and chains were sufficient for the ox, the horse demanded a nicer equipment for his work; but even this was simple, when compared with the harness of to-day. It was not even called "harness" in the seventeenth and eighteenth centuries-for there were no harness-makers, until the latter part of the eighteenth century-but went by the name of "tackling." The head-stall of leather was sometimes made by the shoemaker; the collar of corn-husks was braided at home; the wooden hames were sometimes shaped by the local carpenter; but usually all of these parts were made by the farmer himself. The traces and reins were nothing but lengths of rope, the curry comb was the wool card, and the homemade whip was of wood and leather.

Says an old lady, well on toward the hundred mark:

"Our ox whips were made of narrow strips of calf skin, several strands braided together. These were bound on to the bulb of the whip stock. My father braided his own ox whips, until I was a great girl."

An old stage-coach driver who, with his father,

has covered nearly a century of coaching in the mountains of New England, still cherishes his old coach-whip, made of black whale-bone, a relic of the happy days which will never come again. This whip has been covered, and re-covered, times without number; and is believed, by its owner, to be better than any other coach-whip on earth. The lashes have always been of braided raw-hide; at present, the thongs are only eight feet long, but when this man began coaching, at the age of fifteen, the lash was twelve feet long, for then he drove his six-in-hand.

Bells, universally lovely in their shapes, of iron, bell-metal and—the commoner ones—of brass, made known the whereabouts of the pasturing mooly cow and the bell-wether; they tinkled from the sledding ox-teams, or around the belly of old Dobbin, when the sleighing was good; or at his throat, when he was grazing. High and angular; or, ball-like, with a tinkle hidden inside; or lily-shaped, with a loud clanging tongue—they were lovely, every one, and infinite in their raucous, or mellow, tones.

The saddles, often accompanied by pillions and saddlebags with their spacious pockets, tell their own story about the way the horse was made to carry his various loads; and how adaptable he was to the needs of those meagre days.

The remedies which were applied to indisposed, or wounded, animals were very simple; and were almost entirely from the vegetable kingdom, although animals were sometimes "bled," along with the unfortunate humans. The following are but a few of the old prescriptions:

"A cup of warm maple syrup will take the shagginess out of the hair and give the animals

a healthy look."

"Common groundsil, given plentifully to horses in the stable, will effectually cure greasy heel"; and "a stick of popple in the manger will cure stomach disorders."

"Board-pine yields a sovereign turpentine for the curing of desperate wounds," so they said in the old days; and also that "juniper leaves, mixed with oats, will destroy the worms, which invest the bowels of horses."

Spavin was cured by a concoction of "one pound of angle worms fried in a pound of butter;" and ticks were removed from the sheep, by pouring snuff into the wool in regular rows.

For the protection of his domestic animals, the ingenuity of the pioneer was greatly challenged. Many and various were the traps and snares which were invented to save the stock from marauding bears and wolves and wild cats. Sheep were safe-guarded at night by the erection of the sheep-gate in the fold—an invitation to the wolf to call, but a hard proposition to encounter, when he wanted to go home. Foxes were sometimes tempted to their death by the smell of a cod's

head, lying in the shadow of a fence on a moonlit night, while the farmer with his shot gun was but a few feet away. Sometimes these animals were caught by some dexterous youth, with a simple whip-cut.

Wolves were quite the most troublesome of the wild animals, until after the incoming of the nineteenth century. They were caught in log traps; in hidden pits; and sometimes hooked by a cluster of mackerel hooks, wrapped in wool and hardened tallow, which was placed near a carcass, where the wolf had previously preyed. Hardly a town but has among its early records the raising of a bounty for "the killing wolf."

Side by side with the wolf, was the bear; and this murderer and thief, for all his clumsiness, was notedly agile in escaping those traps which were set for him, were they pits, or weighted saplings. In 1800, bears were still numerous, even in long settled communities. They had an irritating habit, when passing through a cornfield, of hugging several hills of standing corn together in their great arms, and standing and eating the bunched-up ears at their pleasure. The story is told of a man who, entirely unarmed, met a bear on a deserted road and conquered him by throwing mud into his eyes, until he was blinded; then he beat him to death with a hickory fence-rail.

Some of the old sayings regarding animals are

worth knowing; and a few of them are here appended.

"In the severest weather, nature teaches the fowls to roost on the backs of the cattle in the barns, to preserve their feet from being frozen."

"When the bees begin to swarm, run out and stick a butcher knife into the ground, and the bees will not fly away."

"No harm will come to the man who always carries a rabbit's foot about his neck."

"If a rattlesnake bite him, a wise dog will bury himself, all but his head, in a soft loamy spot of earth; and, eating nothing, will stay until the venom be all extracted."

"The oil bag of the muskrat, wrapped in cotton, affords a perfume grateful to those who are fond of musk."

"A bird will fly for the leaves of the white ash to cover her eggs, if a snake come near."

"To tame a wolf, play to him your fiddle."

"To keep crows away from a cornfield, tie old shoes to poles at the corners of the field, and burn brimstone, or sulphur, in the toes."

## VII: The Four Walls of a House —Within

WILLIAM MORRIS said: "Whatever you have in your rooms, think first of the walls, for they are that which makes your house and home." To trace the development of wall-decoration alone, in the homes of the early settlers of this country is a fascinating pursuit. It will lead through rooms, where the walls were the unpeeled logs of the forest; or where rough puncheons were firmly fastened against a possible cave-in; through the white-washed and plastered days of greater conveniences and the days of hand-planed boards; on past the beautiful simplicity of "stile and rail" paneling, to the more elaborate cornice and pilaster; and, finally, when color begins to appear, through the days of early hand-painted murals and wall papers. Hangings and tapestries from abroad had their place, too, in some of the homes where money was plentiful, but these do not represent native development of home decoration and so may claim scant attention here.

What the broadax did for the outside of the first log cabins, it did for the inside, and nothing more. Crude though this may seem, it could have been no hardship; for, besides the beauty of the

bark, the odor which lingers in a spruce room is something to rejoice the heart. As on the outside, so on the inside, were irregular rows of mud and moss, or daub, which filled the chinks between the logs.

We hear that the saw-mill was an early arrival in many towns; and yet the timbers, planks, boards, and slit-work, which went into homes built long after the time at which the sawmill is supposed to have been erected, were shaped for their usefulness by the broadax and the hand shave. Thus we see in New England, houses and barns built as recently as seventy-five years ago, framed with "hand hewn" timbers and finished with "hand sawn" and "hand shaven" woodwork.

Age, where it has not had to compete with weather, has always been a most gracious beautifier of wood. Smooth as satin are the upright sheathings of fitted boards, of which many of the old walls were made; and colored, too, with a richness of brown, or red, or amber, which only time can achieve.

Severe, with their walls of staight, undecorated boards and an uncovered timber in each corner, the old rooms have yet an appeal which, even after a century or two, we can find no means to equal. One feels within them a serene presence, holding within itself the records of the years, the secrets of the past and a benediction, which will be be-

stowed upon those who know how to hold the silence. Here is no distraction of color, design or light; but, rather, simple walls of wood, softly colored by time; soothing lines which lead the eye gently; and an overtone of softened light which is a blessing to the spirit. The mellowing process, which was started a century or more ago, will never be finished, so long as these old walls stand; or so long as they escape the unholy laying-on of hands by fire or flood.

White pine was the wood most used for inside walls, but apparently it was often mistakenly designated as "spruce," for in some of the old specifications where spruce was called for, white pine was used. Attaining to splendid proportions in the glory of its first-growth, the white pine became useful, not only for sheathing, but for paneling, as well. In one house, built about 1790, there is a horizontal panel over the parlor mantel, cut from one piece of pine, which measures thirty-four inches from top to bottom.

In many of the early homes, the walls were sheathed on three sides; the fourth, or chimney side, being paneled. Since the attention of all the members of the family was concentrated on the warm side of the room, when they had time to concentrate on anything except their duties—and since any kind of a house was a triumph of man over nature—we do not wonder that the early "house-wright" limited his paneling. Rooms there

were, which combined panels on the chimney-wall, with plaster on the remaining walls; while others had paneling on the chimney-wall, plaster down to the chair-rail and, below that, either a paneled wainscot, or one of pine, running horizon-tally around the room—the boards generally measuring twenty-eight inches, at least, and sometimes more. Plaster, made of rough clay and chopped straw, was one of the earliest materials and often ran from the girt—the hewn timber along the edge of the ceiling—to the dirt floor.

The plain "stile and rail" paneling, placed below and above the chair-rail, gave place, in time, to more ornate styles, with groups of moldings, or bolections, projecting beyond the surface of the panel itself; and still later, to cornices and friezes and pilasters. During the early years of the nineteenth century, the paneling above the chairrail gradually disappeared, giving way to plaster, which had come to stay.

The chair-rail itself, however, did not disappear—and well it was for the walls, that it did not. "Tipping back" was not an enormity in polite society, in earlier times, and when one considers the number of straight-back chairs which have come down to us, one does not wonder that a little respite from their rigidity was allowed, and that the chair-rail was a necessity. Even now, in farm houses, the time after dinner between the finishing of pie and the return to the field, or the wood

lot, is spent by the tired farmers "tipping back" against the wall, a position of complete relaxation.

An intriguing quality of the old paneling was its suggestion of hiding-places. Here and there, where one would least expect to find it, would be a hidden spring, which would suddenly snap back and reveal, either a cosy little closet, tucked away out of sight, or a passage leading to mysteries unknown. Modern investigators have discovered many such passages and closets by chance, and even the more hardened of them experience a tingle of delight in the discovery.

When the King of England had become unpopular with the American colonies, and extended his long arm a little too far in his reaching for riches, smuggling was carried on by people of the first rank in this country, and many of the fine old homes near the coast had need for secret recesses and quick get-aways.

During Civil War times, the innocent-looking panels over the chimney lintel, or under the slant roofs of upper chambers, harbored many a colored refugee on his way north, via the underground railway.

Even though it may not contain a single secret spring, the finding of old paneling, which has been buried for many years, is always a joy. Often the wrecking iron reveals a fine set of paneling, hidden behind split oak lathing and rough, dark gray plaster; or a wainscot is found intact, with the exception of the chair-rail, which was generally whacked off, to obtain a straight line of walling from girt to baseboard

One hidden treasure of the old chimney place paneling was the sliding shelf, which could be drawn out at table height. Looking like a piece of molding, when in place, upon its release it became a convenient "stand" for candle, or lamp; or for writing tablet, quill pen, ink-horn and sandbox.

The old plaster, which has done so good a job in preserving panel treasures for so many years, was not always the refined white plaster of to-day. Old plaster was oftenest of a heavy dark gray color; and, in New England at least, was usually made of gray clay—this being considered much stronger than white clay—and mixed with hair and water. Made of properties available to any one living on a farm, plaster, or "plaister," was a decidedly home-made product. The pulp plaster, which was introduced in the latter part of the last century, made of sand, the pulp of a tree and water, was not the plaster of the long ago, although, in some of its crude forms, it seems to belong a long way back.

But, whatever the color of the plaster, or the polish on her sheathed walls, there came finally to the housewife a time when she felt a need for some ornamentation—something which she thought would be more lovely and homelike for her walls. Thus, at an early date, some house-holders had their walls whitened with a wash made of powdered clam-shells, and this must have seemed a real advance in home culture. Certainly it made a lighter room. In Philadelphia homes, the walls were white-washed until 1745; and, as late as 1748, we know that New Yorkers were still unacquainted with "hangings."

In humbler homes, clay paint began to make its appearance; and this, too, was a purely homemade product, composed of clay from the nearby clay-bank, mixed with linseed-oil produced by

grinding the seeds of the flax.

A mixture of clay and oil does not sound very decorative to us now, and yet some of the old panels which boasted of this new covering, are still lovely in their soft grays, or yellow-green hues, or even reds, where beet coloring was used.

Shortly before the Revolution "oils" began to be used in some of the finer homes. We hear of a man in Salem, who raised the standard for room decoration, to the envy of his neighbors, by "laying his rooms in oils." This apparently referred only to those parts of the room, or walls, which were wainscoted, or paneled; although, about this time, some of the wealthier families of the South were having their entire walls painted a pure white, the "oils" being ordered from England. Such luxury necessitated a thrice-yearly scrubbing

from girt to baseboard, by way of competition with the great open-throated chimney which succeeded in laying smudges here and there on the gleaming whiteness of the walls.

William Beverly, ordering for his estate from his London agent, sent for "as much paint of a deep olive colour, ready-ground with linseed oil, as will paint two hundred yards wainscot." While dark olive was popular in certain sections, New York had chosen blue, or a blue-gray for her favorite wood color; and New England, in some corners, decided upon a strong gray, dashed vividly with blotches of black. Imitations of marble were numerous and used in rather pretentious homes; while houses dating back a hundred years, still show in good form a combination of black background, with white on the raised parts of the moldings. One device for coloring wood, where "oils" were not available, was a stain made from vinegar in which rusty nails had been allowed to stand. The coming of oils was a real step forward, as may be seen; and oil mills, located in the small settlements, had their share in furthering it.

The period of stenciling was especially interesting and covered a stretch of years, beginning in the late seventeen hundreds. The stencil patterns were simple and were cut out of heavy, stiff material, such as layers of paper, or leather. These were held to the walls, so far as one may discover now, while the plaster was still damp, brushed lightly across with color, or black, leaving a pattern, either in border form, or as an "all-over" design where larger spaces were to be filled—or, again, in panel forms. Around the ceiling line; along the wainscot; and surrounding the casements and door frames these primitive decorations found their way—and their ways has been a delight to follow, for those who have been fortunate enough to come upon it. Done in homemade dyes of many colors, or brushed in with a local clay paint, these stencils mark the next definite bit of progress in wall decoration, with their greens, browns, blues and yellows, generally on light backgrounds—often buff—and brought into sharp relief with the ever abundant black.

One old house in New England, which was remodeled seventy-five years ago—receiving at the time a second wall of lath and plaster in the living-room, so that the corner timbers might be finally hidden—lost a simple, but quaint, stenciling in the process. The old clock, however, which was fastened to the wall for all time, must not be moved from its place, and so the new wall was made to come flush with its front. This left a space behind the top of the clock, where the old frieze was not covered; and there, by the removal of the scrolled decoration on the top of the clock, it was discovered. It is a series of slatted egg-forms, done in darkened brown, or green, on a buff background,



Note tavern in center panel and lake which existed before 1800 WALL DECORATION IN WATER COLOR

surrounded by dots and dashes in regular border formation. It is known that, even in the seventeenth century, walls were "daubed, white-limed and flowered," but whether these flowers grew in stenciled soil, or not, we do not know.

Another form of early decoration for plaster walls-and one which comes down to us enveloped in much the same shroud of mystery, concerning date, materials and artists, as that surrounding stenciling work-is that of freehand painting. So far as the records of a misty past can determine the advent of this work, they seem to place it about eighteen hundred, or a little earlier. Here, when we are fortunate enough to find such an art relic, real ingenuity is discovered, as well. Done in colors quite free from any oil, such paintings have a soft, pleasing finish; and have proved their ability to endure, by the splendid state of preservation in which they are found. The pigments, of undoubted home preparation, were apparently mixed with water; and whatever of "coloring" ability the housewife of the family had attained in her endless dyeing of homespun yarns, must have been applied here, although the actual brush work was almost certainly done by men.

The following home recipe for "water colours for walls" was written neatly and carefully in an old cook book, one hundred and twenty-seven years ago. "Take green verditer, glue, hot water, a little starch; mix thin about the consistency of a boild starch." "Verditer" was a name applied to two pigments, green and blue, prepared by decomposing copper nitrate with chalk and quick lime. Thus we have one recipe, at least, which gives an insight into pioneer resourcefulness. It is to be regretted that none of the brushes have come down to us, for they, too, would have been home-made—probably from the bristles of the family hog.

When a design of flowers was used, they appeared in border forms, within panels, in floating garlands, and sometimes, in happy abandonment, all over the walls. One fine old panel, still flaunting its original coloring, is of black, with bright yellow figures thrown upon it; while black and red were combined on many walls; and browns and blues were also used.

When an old wall, painted from ceiling to floor with a series of landscapes, is revealed to us, the story is a very different one. Here local history, local coloring, and local activities are written in no uncertain script; and, although the perspective and proportions may be in question, that which lies unrolled before us, is something to be cherished.

New England seems to have been the section most attractive to the old free-hand mural painters, for it is there that the finest specimens of landscape decoration have been found. There is a story, well circulated, that some unknown traveler, probably a Frenchman, wandered up the Connecticut valley; and, being poor in money ways, used his richness of artistic ability to get himself a night's, or a week's, lodging, as he journeyed. This seems reasonable, when we know that it was the taverns, especially their ball-rooms, which most often received this unusual form of ornamentation. The stray traveler would not be under foot, if he were turned into the seldom-used ball-room to mess about; and anything to brighten that great, barnlike room up a bit would be welcome.

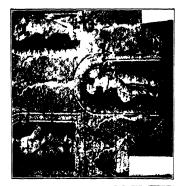
New Hampshire, however, has several private homes, whose rooms have been treated in the same way. There must have been more than one unfortunate Frenchman wandering about the hills and valleys at this time, for the work on different walls varies greatly in skill and technique! Some of these landscape murals are entirely satisfactory in composition, coloring and perspective, while others are the crude attempts of an artist extremely unpractised with his brush. This does not mean that these crude murals are uninteresting. On the contrary, they provide a wealth of historical data, which the more skilled artist could have found no place for, in his nicer scheme of composition.

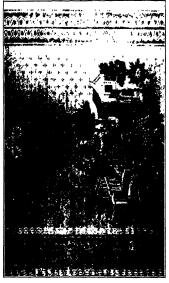
One bed chamber there is in Langdon, New Hampshire, in the old Bidwell Tavern, which was decorated by a friend of the tavern-keeper, when the latter took unto himself a wife. There is a dado of trees, mountains and ice, done in black, gray and white, and cut off from the upper walls by a black line, half an inch wide. Above this, and running to a leafy border of vines around the ceiling, is a most vivid sunset scene, which runs around the entire room—the brick-red glow of the sunset being impartial in its radiance on all four sides of the room.

Against the palest of pale blue skies, great trees rise to the ceiling, on one wall, their trunks carefully outlined with a black line on the shadow side, their foliage done in feathery wisps, or in compact balls suggestive of crows' nests.

On another side is an ocean scene, where the wall, happily, has no window to interrupt the picture. The eye is led past an island or two; and there, as large as a nearby house, graze black cows, with great white African horns and white tails; compact groups of trees are constrained from going to sea, by snugly fitting split-rail fences; a row-boat is tethered by a rope, a good quarter of a mile long; and a slender light-house waves three flags, thus guiding to land some dainty caravels, whose keels ride gaily the tips of the waves.

On the end walls, water slips between rocky falls; a man in a long red swallow-tail coat, with yellow breeches and a black hat, fishes from the high end of a boat; and two fine black-and-white





carriage dogs chase, for as long as the tavern shall stand, two lean and weary foxes.

The note of special interest historically is over the chimney place, where, true to old tradition, it rightly belongs. A simple drawing of the tavern itself appears here, the perspective of the end made clear by a darker red in the bricks. Near it, a lovely lake lies basking in the evening glow; and one wonders why the artist betrayed his trust and put a lake, where no lake is, until the host explains that, in the old days, back more than a hundred years, a lake did bask, where now green mowings lie; and that there, before one's eyes at the doorway, the lake bottom in reality is revealed, with its old markings and inlets.

If such a thing were physically possible, one might be said to smile with one eye and to weep with the other, when looking at these old paintings, so full they are of the grotesque, and yet so overflowing with desire to express the beauty that has appealed to the artist.

The first wall-papers came to America, as early as 1735. Imported largely from England and France, they brought a new note to interior decoration, which was eagerly seized upon, by those whose purses would allow so great a luxury. In 1753 a Boston bookseller was advertising "stampt papers for lining of rooms," wall-paper at that time being considered the business of stationers. Before the Revolution, wall-paper was manufac-

tured in Philadelphia; and yet, in 1800, most of the papers used in America were still being imported. The two terms "calico painter" and "paper stainer" were often used together; and, since both calico and paper were stamped with blocks, it is very probable that the same artisan may have worked on the two mediums, using perhaps the same designs interchangeably.

The original reason for using wall-paper on house walls, was the protection it afforded against dampness. Many of those who lived in the simpler homes in isolated districts, saved the few newspapers which penetrated to them, and papered entire walls with them, showing that they adopted "hangings" for utilitarian purposes, rather than for artistic ones. One old newspaper, found a short time ago, was laboriously stamped with a homecut block of wood, so that a dainty all-over design of a flower, done in purple, covered its entire printed surface. While this may never have covered a wall, it showed the ingenuity of a natural designer, who had no materials but those of his own producing.

The first wall-paper patterns were produced by the use of stencils; and, following this, patterns were cut, or carved, out of wood and stamped upon the paper by hand. Until about 1790, wallpapers were made in small pieces, measuring variously, twenty inches by twenty-eight; eighteen inches by fifteen, or eighteen; and other dimensions. One of these has escaped destruction and brought down to us a design of that long ago time—quaint little blue figures at play, in one row; and equally quaint little blue figures at hard work, in another row.

While wall papering was undoubtedly considered a real step forward, it had serious drawbacks, from the modern point of view. It was the first craze for wall-paper, which hid from sight so many hand-wrought panelings, which are now being brought to light again. Eager to do away with every vestige of the sombre woodwork which was not absolutely necessary for either door, or window, the earlier generations hacked off wainscot moldings, lathed and plastered and papered over chimney place panels, and made their once quiet-toned rooms, places of color and display. The paper was often hung by members of the family and, when it still came in small sections, it must have been an easy task. In one colonial house in Connecticut, recent repairs brought to light in the old parlor sixteen layers of wall-paper!

Another old house, in New Hampshire, was recently relieved of some of the ornamentation presented to it through the years. From the chimney wall of the "best parlor" was first removed a lacy patterned paper; then a pale gray paper with white panels, filled with pale blue devices; next came to light a painted boarding, grained to imitate natural wood; and under this paint,

there was a lovely robin's-egg-blue paint. The next layer on this wall was a delicate gray and white paper, which had been preceded by a soft yellow paper, on which trailed old fashioned cinnamon roses. Beneath all this accumulation of many years, lay the original hand-wrought paneling of the first builder, revealed at last by a wrecking iron; and this had had its own ornamentation and stood revealed in a simple dress of graygreen clay paint—the clay having been dug from the pond below the hill. Sometimes we can really thank overlappings of paper for the preservation of such choice findings.

The oldest American papers were of a brownish gray color; and some were so thick and tough, that they could be peeled off of one room with little trouble and put on another, which could get along with slightly tarnished finery.

"Flock paper" was rather a papier de luxe. It was sometimes called "cloth paper" and was made by printing the figures with boiled linseed oil; and while the oil was still sticky, the "flock"—a fine woolen dust, sheared from wool cloth and dyed—was blown across it. When that part of the flock, which had not adhered to the oil, was shaken off, the figures looked like cloth appliqué work. Flock was also made from feathers, silk and fur.

Although the elaborate papers which came from abroad do not especially concern us in this resumé

of wall decorations achieved in our own country, some mention should be made of them. When a wealthy American wanted a chamber done with "hangings," he measured his walls and sent the exact dimensions to his English agent. The result would be some lovely scenic paper, on which the landscape unfolded itself, without repetition, along the four walls; and, having been done to measurement, it finished without confusion, when it met the final corner. Sometimes a gay hunting scene would be sent across the seas; or Paris, with her unique street views, would come to cheer far-distant American walls.

Sometimes the imported papers were used in rooms for which they were not intended; and the result would be a clear-cut vertical line, where, perhaps, an unfinished tree came to an abrupt meeting with an unfinished ocean.

The scenes portrayed on early domestic papers usually represented rural life. One favorite design which has come back into use, is of a haying scene, where men in open shirts and women under flapping sunbonnets, make hay while the sun sets; and we know that it is setting, because already a boat-load of haymakers has finished and started home, across the placid pond.

While there was a prevalence of grays in the early papers, especially among the hand-blocked papers—and gray as a background was probably often necessary to cover the coarseness and the

natural shade of the paper itself—many and brilliant colors were used, as well. Vivid blues, reds, and greens have retained their clear tones for a hundred years; and to-day, passed quickly before the eyes, give the impression which one gets from a kaleidoscope.

One room near Lake Champlain, papered about ninety years ago with a gray paper covered with gray leaves laid closely together, is still intact and fresh. In another paper, dating back probably a hundred years, a baker, who started out to deliver bread a century ago, is still delivering it faithfully, night and day, and dropping loaves along the road as he goes-or are those loaf-like spots only the hoof-prints of his three-legged horse in the sand? The ball-room of an old tavern in Meriden, New Hampshire, has its original paper still in good condition, a pale gray with a blackish blue rosette, running up and down in rows, and lovely beyond words. Another style of paper represented figures, resembling statues of white marble, surrounded by marble filigree. Occasionally rooms were papered in black and gray, in sign of mourning—this being done in some homes on the death of Washington.

One of the recipes for making paste, with which to keep these old papers in place upon the walls, reads: "A pound and a half of rye flour, made into a batter and scalded with boiling water, with a cup of sugar added. This will make one pail of paste." Simple, surely. As papers grew more delicate in texture, rye flour was found to be too heavy and dark for paste purposes, as it sometimes stained them, and only wheat flour was used thereafter.

Although in 1840 wall papers commenced to be printed by machinery, the process was not perfected until 1867; and it is from that year that the decline of hand-printing by blocks began. Although the old block printing is still done on the higher grades of paper, the industry has practically passed away; and it behooves any who have fine old hand-blocked papers to guard them well.

## VIII: The Four Walls of a House —Without

IF food comes first, shelter comes second in the lives of mortals; and in the early days of our country, while shelter did not necessarily mean four walls, it meant at least some kind of a wall, or barrier, against the dangers of a new and exposed life.

A study of the house-walls of our forefathers yields a real thrill to those who are interested in

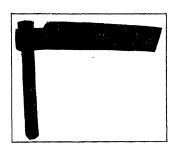
the old days.

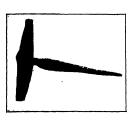
Red brick, weathered gray, brown stone, or ivybound, a wall is one of the creations of man which vies with nature in beauty. Standing firm, or crumbling into ruins, it makes an unfailing appeal, sometimes by its strength, and sometimes by its artless art, if one may call it so.

Leaning upon his gnarled staff, a neighbor-man, not long ago, looked back with far-seeing eyes into his boyhood and spoke of the first home he

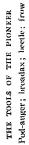
could remember.

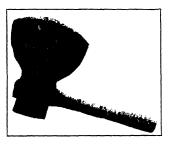
"Father and mother and us children all went along. We started with a yoke of steers and what goods we could carry—it was when the sun came up. Father and me walked beside the cart and eleven of the home men-folks went along. We











blazed a trail and chopped enough to get the critters through, till the sun stood overhead. Then we stopped and made us a fire and et our dinner.

"Then the men-folks set to work—how they could chop in those days!—and, by Gorry, when the sun went down, you could see the sky again—and there was the four walls of our new home. T'want nothing but a log cabin, but t'was a home."

Blessed memories these pictures are, to the old folks who still remember the pioneer life of the country; and their reminiscences are happiest, when the day brings a willing listener to their tales.

The materials used for home construction in the early days show the resourcefulness of the builders. Some of our forebears, who came sparsely equipped across the seas, used sod on a frame of wattles for their house-walls. This material is better known to us to-day as twigs and withes. The Pilgrims found open maize fields behind the famous rock, with forests beyond; while Manhattan seems to have offered forests, from which the early English and Dutch settlers quickly made for themselves huts of bark. Where the settler was forced to fell trees to get even a footing for his house, that house was almost certain to be a log cabin; and this type of dwelling was undoubtedly the first popular form of homestead.

The broadax of the early settlers and the late pioneers was quite different from the ax which we know to-day. Its blade measured, from hammer end to sharp edge, ten inches; and across the blade, nine inches; while its handle, roughly speaking, was but a foot long. It was the most important tool used in the raising of the early homes.

The typical log cabin, with logs laid horizontally, was one of the first fruits of the broadax, and was made of newly-felled trees. The limbs having been removed, the logs were hewn in a hollow near each end, so that the one below fitted into the one above, making a wall which, when chinked with moss and clay, was practically impervious to the weather. This was roofed with thatch, or bark, or more logs.

The puncheon house, made of logs set vertically in a trench, was still another form of log house, and took its name from the puncheons, or logs hewn on one side only, which were fastened around the walls inside, to prevent a cave-in.

The walls of many early New England homes were made of clay, into which straw was thickly mixed. "Wattles and daub," a phrase which sings itself into the mind like that other by-gone song, "needles and pins, needles and pins," formed the upper section of those houses in which the half-timbered designs of old England were lovingly copied. These houses were made with heavy hewn-

timber frames, the space between the uprights being filled with thick wattles and daub, or twigs and clay, put directly on the hemlock lathing. Houses built as late as the latter part of the nineteenth century, in some sections, used this lathing—not the slender slats of modern machinery output, but broad hewn boards, slit irregularly up and down—though still clinging together in board form and nailed so that the slits were held apart. Against this irregular surface the plaster was placed, slipping into all the interstices and forming a solid wall.

Daub below, with an upper story of shingles, came into use when houses became a little nicer: also planking below and daub above. In one of the early community houses, erected in Pennsylvania in the seventeen hundreds, one house was built in the most surprisingly thorough way. The upright timbers of the frame had slots running down both sides, into which oak boards, wrapped with straw and daubed with clay, were slid from the top; and when the long slots, four stories high, had been laboriously filled to the top, a brick wall was built around the whole. Not satisfied with this, the builders, building apparently for eternity, then overlaid the bricks with narrow clapboards. Perhaps it is not necessary to add that this building has outlasted the reason for its being.

Clapboards were at first split out by hand from

the log, like staves, and helped to supply the lack of sawn boards. In 1633, some Danish settlers erected the first saw-mill in New England at Piscataqua, but for every sawmill which was built in the dim recesses of a primeval forest, there were many square miles where there were none. Besides this, the early upright saws did not at once take kindly to the sawing of clapboards, or "quarter boards," as they were called as late as

1735.

One of the requirements in the ordering of materials for a meeting-house in the early eighteenth century was that the "quarter boards" should be without sap. O wise and learnéd builders of the long ago, how carefully did you remove that sap! There was no steam in the old drying process, except that which rose at the touch of the elements, as they worked month after month to make the boards safe for the ages. Clapboards were of many widths, some being laid three inches to the weather, some eight, and some ten, and they were used in divers ways. They covered daub, when the settlers discovered that the climate of the new world made the half-timber house of the old world impractical; they covered brick, as has already been noted; they topped the house whose ground floor was of daub; and, in some instances, they were even used to cover the rough walls of the log cabin. When a piece of clapboard is removed, in many of the old homesteads,

the daub, or plaster, is found immediately beneath, still clinging firmly to the old split-hemlock lathing.

In Pennsylvania, Delaware and New Jersey, stone was used for house building, as it was also in Vermont, where great gray blocks, often in triangular shapes, were fashioned into heavy walls. Sometimes two feet thick, these walls have seen the coming and going of many generations of men.

Recently, in upper New York State, an old home, its wooden walls painted to simulate gray stone, was torn down. The work of wrecking revealed that the real walls of the house beneath the outer covering of wood, were of the finest brown stone, quarried a hundred years before. It would be virtually impossible to-day to build a wall equal to the one which was uncovered, laid dry, with little, or no, mortar between the stones.

Shingles were used as an outer wall-covering in the sixteen hundreds—and these shingles were all hand-riven. A cross section of hemlock, or spruce; a broadax; a frow; a beetle and a shingle-horse were the requisites for hand-made shingles.

The "frow" is a heavy blade of iron, with a short wooden handle joining it at right angles at one end; the "beetle" is a heavy wooden mallet, sometimes coopered with bands of iron, sometimes almost entirely encased in a sheet of welded iron; while the "shingle-horse" was made in various patterns and was generally ridden like a horse by the user. It had a crude attachment which held the shingles firm, while they were being shaved thin at one end with a hand-shave. One side was made as smooth as satin, to shed the rain, while the other was left a bit rough for adhesive purposes. These shingles were put on to roof, or side-wall, with square-headed, sharp-pointed nails.

If we are ignorant of the amount of labor which went into the making of walls in earlier times, we have but to listen to the description of the making of a shingle, as given by a man who remembers "splitting shingles" when he was young, and still has in his possession the tools for the

process.

"Take a cross section of spruce, or hemlock, and split it with the broadax into quarters. Then lay off four lines with the frow from one of the straight edges. Cut down three and five, then cut two and four—this is 'eating in,' or 'splitting out.' Shave the shingle on a shingle-horse. The shingle bolts, those chunks of wood too hard for splitting, used to be called 'unmarchantable,' and were made into seats for the homefolks, or the meeting-house. The beetle was used for pounding on the frow for the 'eating in.'"

Although the above rule was given for hemlock or spruce, shingles were also made of cedar, when the big trees of the country were still standing; and of cypress in the south. Hemlock was supposed to "hold a nail well" and for that reason was popular for roofing. Some of the old cedar shingles, used in New Jersey, measured twenty-eight inches long, which spoke well for the size of the first-growth trees, from which they were split.

Where protection was especially needed against the Indians, the house walls were made very strong for defense. In Massachusetts, one man built his walls of solid oak planking and, outside of that, had a brick wall one foot and a half thick. In New Hampshire, a farmer made his wall of heavy daub and oak, and then covered it with red-oak

planking.

There is much uncertainty about the manufacture of brick in the old days, although it is known that fairly early there were kilns turning out handmade, new-world brick. It is true that houses were built in Boston in the seventeenth century, of bricks brought from England, but here and there one finds brick houses of an early date, made of brick manufactured at a local kiln, which ceased activities after turning out the material for those houses.

In 1792 Noah Webster wrote to his friend Timothy Pickering to ask for a recipe for making brick, having in mind at the time the building of a State House at Hartford, and stating that Connecticut was sadly ignorant on the subject. Pickering answered, saying that Philadelphia had followed closely an old Massachusetts law regarding brick making, and that Philadelphia brick was superior to any in the country. He further stated that "New York, a rapidly growing city, furnishes no clay, but is supplied from New Jersey with ordinary bricks and good ones from Philadelphia." He then gave directions that the molds should be shod with iron, that each mold should be for a single brick, and that they should be thrown into a tub of fine sifted dust, not water, to prevent bricks sticking to the sides.

He says: "One moulder, one man to work the clay, and one to wheel to the tables, and a boy who bears off a single brick at a time, constitute a set who make two thousand bricks a day. This

is a regular task."

The frames of the houses which gradually evolved from the earlier types, taking on forms which are more familiar to us to-day, were made always of oak. Seasoned for many months, then hewn by hand with the broadax from the natural log, the timbers were finally bored with rough augers to make the holes, into which the oaken pins would slip, when they should be fitted side by side and finally "locked" at "the raising." Men for miles around would gather at the new cellar hole and take part in the raising, sometimes forty strong, sometimes seventy-five, the more the mer-

rier—and the sooner the great, softly-colored timbers raised their height into the air. New marks, these houses were, on an otherwise natural landscape very often, and some of them were to remain a part of that landscape for hundreds of years.

It was a glad day, when the house went up; and ten gallons, or more, of flip were often consumed in the up-go. But the preparation for the raising of wall timbers and cross pieces was another story. Hewing wood by hand was a slow and wearisome task; and, when one has held an old pod-auger in one's hand and wondered at the pitiful crudeness of it, one marvels all over again at the brawn and perseverance of those early fathers. Shaped like a slender garden trowel of modern make, the pod-auger had only a half inch of barely perceptible grooved thread at the tip, so that the wielder of this little implement had veritably to bore into solid oak, with little more than a piece of shaped iron.

Although, now and then, one may find an old pod-auger nowadays, they are not numerous even in collections of antiques; and their use dates so far back that, even a hundred years ago, there was a saying, "Oh, that must have been 'way back in pod-auger days!"

Placing the date of erection on an outside wall of a house was not unusual in the eighteenth century. In northern New Jersey, in the old town of Scotch Plains, there are two houses which bear their dates; one, of brown stone blocks, has a diamond-shaped stone inserted in the wall near a second story window and bears the date of 1786; the other, a mile further along the village road, shows the date, 1774, in blue brick, worked into the red brick chimney on the end of the house, the figures being from four to five feet high.

Off Featherbed Lane, in New York city, one old house bears its date in beautifully wrought iron figures, fastened high across one of its gable ends.

Painting, or "coloring," was not thought of for nearly two centuries after the first houses were built. There were no house-painters, as we know them to-day, for paint itself had not arrived; and the old wooden houses weathered to beautiful soft grays and browns and sometimes to silvery black.

In the records of building and dedicating meeting-houses about 1790 and later, we find many entries which show that the neighbors got together and "voted to color the meeting-house"; and, from the frequency with which these votes recur, we gather that, while the will was strong, the paint was weak, or hard to come by. Undoubtedly those houses which were built a hundred and fifty, or two hundred years ago and which still retain their clapboards, were better seasoned and prepared for their work in life than those of to-day,

whose clapboards and "trim" fall soon by the wayside, if left unpainted.

As the years wore on, a lime whitewash was applied to some houses, for purposes of preservation against dampness and gathering moss, but the idea of coloring for the sake of beauty seems not to have been considered at all, until within the last hundred years. Clay paint was the first real paint used on the outside of walls. Sometimes the required clay was dug along the shore of some local pond, sometimes the farmer found clay in a bank on his own land.

This clay was mixed with linseed oil, ground from flax, and behold—paint! Generally the paint was greenish gray, or perhaps a reddish hue, if, as sometimes occurred, it had been colored with beets.

Red, indeed, was the paint in most demand when "coloring" became a possibility for the ordinary home. Whether our forefathers chose red because, having lived in dull houses so long, they longed for a brilliant hue; or because Venetian red happened to be the cheapest paint on the market, we do not know. Venetian red came in powdered form, cost two cents a pound, and was mixed with linseed oil. This was called "strong paint" and even after some householders had changed the fronts of their houses to white, or pumpkin yellow (sometimes called "spruce")

they still continued to keep the backs of them red—one coat of red often out-wearing several coats of a less tenacious color on the company side of the dwelling.

Although one would think that linseed oil would be available to the leanest pocket-book, since it was a simple product of the flax raised on many of the farms, there were those who dispensed with it entirely for their coloring. Some houses and barns were painted with Venetian red and skimmed milk, and stand to-day, still keeping their color, as evidence of what thrift can accomplish.

Even with red pigment at two cents a pound, there were others who escaped even this expense. One man, with an eye to economy, made the "red trim" for his house from home-ground brick-dust, resin and benzine, the last product costing only one third the price of turpentine, which had by this time become one of the useful solvents. Another made his red paint of red earth and skimmed milk.

When white coloring became a possibility, white lead came into use. This, however, was not the popular white paint, for it cost real money—and sometimes real money was not. As late as 1857 a "ground water-lime" was used as the white pigment, in place of lead. In reality much of the white paint used in the country districts for many years, was nothing more than lime and water,

sometimes being enriched with a taste of linseed oil.

Steadfast and enduring as were the house walls of the old builders, the foundations upon which they rose were destined, in the majority of cases, to outlast the walls themselves by many, many years. Deep and massive, the old foundations held the upper walls as long as they might endure; and then, when these tottered and fell away, seemed to settle down to await the blowing of the last trump. Many of these foundations are still to be seen, standing firm although intergrown with sumac, alder and trailing vines. Beauty spots these cellar holes are in the open countrysides, and almost always surrounded with centuryold lilacs and reminiscently sweet cinnamon roses -the loving and persisting touch of some longdead mother of the home that is no more.

Cellar walls were not laid smoothly in cement in the good old days, but were laid dry, clinging together simply because they were so well placed that they could not fall apart.

The depths of some of the old cellars is another point of interest; and some New York State housewives, dwelling in ancestral homes, complain that they are not able to reach the cobwebbed rafters of their cellars, even with long-handled brooms.

In New Hampshire, where granite boulders abound, they were removed from the pasture

lands, drilled and split into long slabs and smoothed, and then placed outside the foundation walls-to act, not only as an additional support for the oak sills, but as a possible deterrent against uncharitable attacks of weather. Robert Frost, in referring to the power of frost in New England, says knowingly: "Something there is which does not love a wall." These granite slabs measure from six to eight feet long.

Says a man who knew stone in the years around 1800: "A stone for a cellar wall must have bed, build and face. The ends have not much to do with strength." In other words, if the bottom, top and front of the stones be right and true, we may expect a lasting foundation.

## IX: Light from Berry, Beef and Whale

In the very long ago, in what may truthfully be called the "Dark Ages," dawn and dusk marked the limits of man's waking day. When the sun went down, labor stopped for very want of light with which to carry on; and it was not until crude forms of artificial light were discovered, that mankind started on the habit of working overtime. Up with the birds at the first streak of light in the east, and "to bed with the chickens," was wholesome living, no doubt, but it was not until the night was made available for work and play, that culture and civilization began to take long strides forward.

Only so short a time ago that some of the older generation remember it still, prayer meetings and weekly singing schools in the country were convened at "early candle light." It was the only announcement of the time of Sunday evening service and, although we do not know how, without more clock-work precision, the neighbors all gathered at the same time for their worship—gather they did, and in numbers which shame us to-day. By "early candle light" the milking was finished, the supper dishes washed, and men and women

were sitting in the old square pews, listening for the first tone of the tuning fork. Dusk without under the pines; dusk almost within, so feeble was the glow from the home-made tallow dips, although candles were supplemented in some meeting-houses by sperm-oil lamps.

It would be a mistake, however, to suppose that man made the transition from darkness to light by means of the candle. The torch of primitive man enabled him to get about in the brush at night and also to keep the animals at bay, but it was not a lasting illuminant. Some of our earlier fore-bears suspended on poles the flaming bodies of fish and birds and enjoyed the light which they engendered, while others rolled resin in wrappings of leaves and made for themselves "fire sticks."

Among the first settlers of our own country, we find lighting facilities rather awkwardly limited. At this time candles had to be brought from England, so little could the new-comers afford to relinquish their supply of fats for candle-making, and these cost fourpence apiece, making them a luxury. The Pilgrims found the Indians prolonging their daylight by the use of the "pine torch," and gratefully accepted the idea, finding this lighting material ready at hand in the surrounding forests. As late as 1795 the pine knot and root were used, affording a light surpassing candles," so full it was of "terebinthine oil."

Usually these torches were made of the dried

limbs of the pine tree, cut off a little below the joint—the slender part supplying the handle, and the knot, the lighting fluid of pitch. This made a light which could be carried about easily in house, or barn, and was also fastened on an iron spike for stationary use.

The drawback to this method of lighting was the pitchy dropping, for, as was sometimes said, "the stick dripped," and the torch was therefore fastened over a stone in the chimney-corner and seldom placed on a stand, or shelf.

Such a free-will instrument as unprotected flame must have kept the shadows dancing on the old walls—and how reading and sermonizing were carried on in its glow, it is hard to understand, but we know that it was done.

Pine knots and "candlewood" are often confused but, although they came from the same tree, they were quite different things. Candlewood was not taken from the knot of the pitch pine, but from the heart, or what was known as the "fat wood" of the tree. It was cut into thin strips about eight inches in length, and tied into small, easily handled bundles. When these were well seasoned, they were the winter lighting plant for many a farm home, and town home as well; and the price paid for candlewood, with its rich, tarry possibilities for illumination, was greater than that paid for walnut wood.

The Reverend Mr. Higginson, writing of con-

ditions in New England in 1633, gives the following description of this early lighting method:

"They are such candles as the Indians commonly use, having no other, and they are nothing else but the wood of the pine tree, cloven in two little slices, something thin, which are so full of the moysture of turpentine and pitch that they burne as cleere as a torch." Others tell us that the pine was "split into shivers."

Another primitive form of illumination was the "rushlight," called by some "the light of antiquity." This was made by taking an ordinary rush, stripping it bare of its bark, or outer skin, and dipping the remaining pith in grease—such grease as had been saved from the family cooking—and leaving it to harden. It is unnecessary to say that this light was a feeble one. Among the Irish, these piths were often twisted together, until they became "the size of a man's arm or middle," and from this accumulation of fibers a light of real force may easily have been made. In some homes, rushlights were set in metal holders, becoming immensely dignified thereby, or again they were suspended on upright iron hooks with a heavy base.

Only seventy-five years ago, matches were neither common nor cheap and the paper "pipe lighter," made of twisted newspaper, which was lighted at the hot coals and carried the fire to the smoker's pipe, or to the kerosene lamp on the chimney shelf, still lingers in the memory of many people of middle age. This was an economy which survived for many years after matches had become more or less available for all.

But before we go on to matches, there is the question of flint and tinder, upon which we must touch. It was not only the savage, developing into civilized man, who was addicted to the tinderbox for striking fire, but our own American forefathers, as well, who tore their knuckles on this necessary, but inconvenient, little device. When the fire went out, in the good old days of the colonies, it had to be entreated with much earnestness, before it would return to the careless householder. It would be hard to calculate the hours of labor which were expended upon this instrument of torture. When we remember that the tinder-box was used for two centuries; that fires necessarily "went out" more or less often: and that it took from a couple of minutes to half an hour to make the flint strike a spark against the steel, we realize the amount of time and energy saved by the invention of matches, and of our own modern gas and electric stoves.

The flint was an extremely hard piece of quartz with a sharp edge, and was about two inches in diameter, when circular in form; the steel was a grade of iron, combined with a small portion of carbon; the tinder, any inflammable material which would "catch" easily, such as old, scorched

linen, or dry tow. The ordinary flint-and-tinderbox was circular in shape and held these articles and also a "damper," which was an inner cover of tin with a flat handle, fitting just below the cover of the box, and used for smothering the tinder, when the spark had been transferred to the "spunk." These spunks were slender strips of wood, dipped in sulphur, and were used to carry the spark from the tinder to the candle, or kindlings. With the steel hanging in the left hand, and the right hand endeavoring to strike it with a bit of flint, the process was necessarily a difficult one, especially if the night were dark. The invention later of a trough-like box with a steel wheel at one end (which was kept spinning with a thong drawn tightly and hitting against the flint within the box) made the process shorter. Sometimes the man of the house would flash a little powder in the pan of his old-fashioned flint-lock gun, the spark would be caught with a bit of tow, this transferred to some bone-dry shavings and then applied to the waiting wood in stove, or chimney place.

These were laborious ways of getting a spark; and where the homes were only a mile or so apart, it was easier to borrow a few hot coals from a neighbor. For this purpose, a shovel was carried along; or, in earliest days, a chafing dish, an iron vessel especially made for carrying hot coals.

"I remember," says one old lady from northern



PIONEER LAMPS AND LANTERNS

Made of pewter, tin, brass and glass; and used for burning whaleoil, petroleum, camphine and kerosene New Jersey, "how Hiram and I, after we set up housekeeping on the valley road, used to come dark home from mother's some evenings, and more'n likely find the fire gone clean out. I'd call out to Hiram, before he could get old Sam unhooked, and he'd climb in again and drive on to Bateses for some coals. We didn't have matches in those days and we had to do a lot of neighboring."

Although matches to-day are one of our cheapest household necessities, they came slowly along their way to us. In 1827 matches did actually make their way to this country from France, but even in 1836 they were still clumsy, phosphoric articles. Having been dipped in sulphur, and later into a pasty substance composed of red-lead, chloride of potash and sugar, they were not even then ready for use. Accompanying these would-be matches was a bottle of sulphuric acid, into which each match had to be dipped before it would break into flame.

Another early match was made of "chlorate of potash and sugar and gum; sulphuric acid, contained in a small glass bead, was then rolled with some of the paste, in gummed paper. Now the end of this roll is punched with pliers, the bead crushed, and the acid, coming in contact with the chlorate, makes a burst of flame."

One of the earliest friction matches was struck by being drawn through folds of sandpaper, held between thumb and forefinger. These matches made a crackling sound when they ignited, but the sound was gradually eliminated, and finally they came to be called "noiseless Lucifers"; later "noiseless" was dropped and the name "Lucifer" became the common name for all matches in ordinary use.

Brimstone matches of sulphur came in sheets, or rows, of forty splints, with heads of reddish brown and feet fastened slightly together; they were wrapped in brown tissue paper and each package contained about a dozen rows in all. One still finds these Lucifers, unused, in old tin matchboxes, which have long been set away, as no longer useful.

Still another old match was called the "Vesta" and was a slender wick of twisted cotton, covered with wax, and tipped with one of the inflammable pastes.

When we come to the subject of candles, the question of light takes upon itself a dignity which

has been lacking before.

Although, wherever light appears, beauty is also present, neither the pine-knot, nor the spermoil lamp, can be said to have the grace and poise of the slender candlestick, surmounted by its column of snowy wax, creamy tallow, or bayberry green.

Bayberries, boiled, furnished wax for candles, which were not only pleasing to the eye and the nose, but also impervious to the heat of summer,

and ungreasy to the touch. These were much used, particularly on Cape Cod. Adding a special note which no other candle has ever had, they threw off an aroma which was sweet incense in the room where they were burning.

When animals had increased in numbers, the old tallow dip became a familiar light, from north to south, and from the coast inland, as far as man had penetrated. "Dipt" by the housewife, when the weather was cool and the brass kettle had been swung off the fire with its burden of warm beef-grease, the tallow dip came to being only through patience and extreme care. Later, candle molds of tin came into use and, with these, the supply of candles for the home was prepared with infinitely less trouble than formerly. The tallow, or wax, was run into the molds, doing away with the old hand dipping; and when once the mold was full, the worker's task was finished. until the tallow should have hardened for a day or two, when the removal was a simple matter.

Candlesticks were so common in all of the old homes that many types have come down to us. Candlesticks of silver and of brass graced the tables and mantels of the well-to-do, and those of iron and tin supplied the humble homes—a long procession, like a lovely frieze against the years.

Candles were also used in lanterns, as we shall find later; and were often placed in simplywrought tin sconces depending from ceilings and fastened to side walls. Long after the then modern lamp had made kerosene safe and sane, and kerosene lamps were generally adopted by more progressive households, the use of candles persisted in those homes which clung to the old ways. In many a farm kitchen, "best room" and chamber, they threw their gentle rays; and between the cattle in their stanchions, their little lights flickered back and forth at milking-time, long after more approved ways of lighting were in general use. Abandoned eventually by the up-to-date, when the kerosene lamp had proved its efficiency, candles and their manufacture did not stop on many farms, until well on toward the close of the nineteenth century.

No longer do the housewives of America sit by the hour and dip their long, strong lengths of wicking; nor do they take the short-cut and fashion candles by the handier mold—but use these dainty relics of the past, they surely do. No longer a necessity, they persist by their very loveliness; and, for beauty's sake, the housewife of to-day still treasures her polished candlesticks and finds delight in the soft glow of candle-light.

Although the subject of lamps and their oils is here treated after that of candles, it would be a mistake to suppose that lamps followed candles chronologically, although this belief is general. When the first settlers came to this country, there were both candles and lamps in use in the world.

Pine knots were hardly the lighting equipment to satisfy ambitious homemakers, and those of the settlers who lived near the coast, and had a leaning for the sea, soon found that their lighting fluid was swimming, all unconscious, in the briny deep. They took early steps to give it a less watery abiding place and why not near their warm, but overdark, chimney-corners?

The first oil which was used for lighting purposes came from the liver of the cod, and this must seem to us to-day a heavy and unlikely product for illumination. Oil from the sperm whale, taken from a cavity in the head of the sea-king, was, however, the oil of common use. A little later than the middle of the seventeenth century, the whale oil industry was flourishing on Cape Cod; while in 1671 Nantucket, under its old name of Sherburne, was the greatest whaling town in the world. Even in sperm-oil, there were grades of excellence; and while some of it was heavy, thick and dark, with a disagreeable odor, some was of pale yellow and quite without odor. The secret of the latter product was that it was boiled at sea, before it was many days old. In a newspaper of only a little over a hundred years ago, an advertisement appeared for "Pure Winter Pressed Sperm Oil," giving the idea that oil pressed in the warm summer weather was of a precarious nature.

However, where the whaling industry was not

possible, the elegance of whale-oil lamps was slow in arriving; and in notes written of an inland Massachusetts town, we find that, until after 1800, oil and lamps were seldom seen. In Hartford, Connecticut, in 1795, a note was made of the fact that "a junk bottle of oil and a tin lamp were purchased," by some progressive person. "Junk bottles" were high-shouldered, four-sided bottles of greenish brown glass. While oil-cans, as we know them to-day, are perhaps our most uninteresting domestic implement, the little tin cans, which contained the early whale oil, are extremely shapely and nice, even those of petroleum days having an air of distinction.

For the use of sperm, or whale oil, crude lamps of many shapes were gradually devised. First among these was the Betty lamp, the "saucer lamp," or "the grease-burner," fashioned on the lines of Roman hanging lamps—a shallow vessel for oil with a spout at one end, on which the wick of twisted rag might rest, and a raised handle at the other end. This, at first, was little more than a flat piece of metal with a turned-up rim to keep the oil from spilling over. It was suspended on slender chains with an iron hook sharply pointed for sticking into the wood-work near the chimney. Such a lamp, lighted with a live coal, and convenient, for all its crudity, could be tipped at the right angle to catch the last drop of oil in the vessel: and could be lowered into the great iron pot, as it simmered over the fire, so that the housewife might examine the state of her stew. It is hardly necessary to add that the light from these tiny "grease-burners" was not dazzling; and that the odor therefrom did not bring to mind the aroma of flowers that bloom in the spring.

Gradually the form of the lamp changed to that resembling the candlestick, and oil lamps of pewter, glass and tin, simple of line, came into existence, to remain in use until the nineteenth century was beginning to grow hoary with age. So varied were the shapes of these oil lamps, that it is hard to mention one that was more usual than the rest. In tin, the shapes remind one of the English "cottage loaves" of bread, formed of two balls, the upper one being slightly smaller than the lower; in pewter, the form resembles the slender-based candlestick, growing larger for the oil bowl at the top; while the glass lamps were both squat, and set on high standards. Since flat wicks were invented in 1763, it is probable that most of the old pewter lamps with round wicks were made before this date.

There has but recently come to light an old oil lamp of most unusual shape. It is like a tin candlestick at the base, and suddenly flares into a queerly shaped oil tank at the top, in which there is an opening for a flat wick, at least an inch and a half wide, with three slender perforations on one side, through which a knitting needle could be

inserted to raise the wick, when it had burned down to the frame. This is undoubtedly the work of some skillful farmer, who dreamed of the flat wick, before it had been thought of by his contemporaries.

The recipe for keeping old pewter lamps bright was: "Use a scouring rush and elbow grease."

With the passing of whale oil as an illuminant, and the introduction of petroleum, camphine and, later, kerosene, we feel a definite removal from the really early days and ways. Although to the younger generation and even, indeed, to many of the middle-aged folk of to-day, kerosene is a subject for laughter, its passing is not yet, for throughout all country sections of the land, it is still employed, while the use of petroleum and camphine are well remembered by many.

Petroleum was first noted in America in 1814 and was often found in those early days, when brine wells were being dug. Much of this precious product was naturally lost, before its usefulness was known; and the simpler lighting methods continued to be used for a long time after they might have been supplanted. When, indeed, petroleum was considered worthy of attention, it was bottled and sold as a "cure-all," under the name of "American Oil," passing through this initiatory period before it was allowed to become the light of the new world. When its lighting

properties did become known, a real transformation in domestic comfort began.

A thick, dark substance, petroleum is remembered by some as "lamp oil." Used many years in its crude form, it finally underwent distillation and was refined into our well-known kerosene. The lamp, which took form at the call of petroleum, was much like the whale-oil lamp, differing sometimes only in having two tubes for its round wick, instead of one. Also, to each of these tubes a metal cap for extinguishing the light was fastened by a tiny chain.

The word "camphine" is generally uttered with a bit of a shiver down the spine, for although all oil-burning devices were dangerous, camphine was the illuminant terrible. When we find that it was a mixture of rectified oil of turpentine and alcohol, we have the key to the frequent explosions of these little spirit lamps, which sometimes "blew up," causing fire and real disaster. Many families never used camphine, but made the leap from petroleum direct to kerosene. Others speak of camphine without a tremor, however, as a real improvement in home lighting. The camphine lamp was a small, broad-based affair of glass, or thin brass, with one rather long tube, through which passed the round wick. Its light was white.

One "female" graduate of an old New England

academy, remembers the days before 1859, the date of the introduction of kerosene to her school, while yet camphine lamps were in use. She says:

"Oh, how frightened I always was at singingschool, when they no longer used candles, but brought into use those little camphine lamps! They would set them along the benches; and I was always afraid that the pupils sitting in front would turn around and tip them over and explode them. I had little pleasure in my singing

those nights."

Shortly after the middle of the nineteenth century the kerosene lamp was introduced. Unpoetic and uninteresting as it seems, in comparison with the older methods of lighting, its coming was fraught with intense interest, for it afforded a clear light by which to read, spin, whittle, or entertain with real comfort. The invention of the glass chimney, as well as that of the ventilated burner, was really epoch-making; and the broad woven wick, which raised the refined petroleum by capillary attraction, won its own praise. Both chimney and burner were more beautiful in form in the earlier days, than they are to-day, and naturally their introduction caused a bit of a stir.

A certain amount of terror was connected with the new kerosene lamp, too, and some of the old tales of the purchase and setting up of this innovation are enlightening. One little girl, five or six years old then, tells to-day, as a grandmother, her memories of this great event in her own home.

"I remember there was great talk about father's riding to Windsor to buy one of the new lamps, the oil and all. He rode home with it and set it up on a high shelf in the sitting-room. When night fell, we all squeezed together at the kitchen door-mother, and the girls, and my brothers, and all of the hired help. I was somewhere there, too, for I remember how cautiously father walked in to the sitting-room, and how we all held our breaths, for we knew that he might be blown to pieces. He lighted the lamp so carefully,-then he dodged back to us at the door and we all watched to see what would happen next. A little later, he stepped fearfully in again and turned the wick up a little, then made his perilous return, still expecting to be caught in explosion and death. And after all nothing happened! They let the lamp burn a little while that night, and then blew it out to save for company. It was not until long after this, though, that we stopped using candles."

Since kerosene lamps were first used in many homes only on company occasions, there was no need for large quantities of oil, and the first kerosene cans held only two quarts. Sometimes the careful housewife put a twist of red wool yarn into the oil vessel of the glass lamps, so that any sediment, which might be swimming about, would

have some other haven than the bottom of the lamp. This insured a clear fluid for the "best room" lamp, and besides—the red wool looked pretty. The custom is still adhered to, in many New England homes to-day.

Of all the carriers and holders of light, there is nothing more appealing than the lantern. It is safe to say that, until 1875, no lantern was made which was not attractive to the eye. This is a broad statement, but one which is well substantiated by the various types of lanterns which have been preserved—types so numerous that there seems to be no recording them. The lantern of sheet iron, or tin, pierced, or punched with a nail and rolled into form for holding candles, contained all the virtues artistic, although it was certainly ineffective, so far as light was concerned, the faint mystic radiance which sprinkled through the close spot designs, being a poor substitute for the sun, or even the moon. These pierced lanterns had a long vogue and, in fact, passed but a few years ago, a man of barely sixty years, giving the following reminiscence of his own experience with them:

"I used one of those old punched lanterns for milking, boy and man, for kerosene was used in the house long before it was thought safe to use it in the barn, so near the hay and all. It gave about as much light as a lightning bug; and we had to go to the house two and three times during the milking to snuff it, for we didn't dare to open it in the barn. We lost a lot of time with those old lanterns." The lantern of this type is sometimes called the "Paul Revere" lantern, but in most efficient in those days of unlighted streets, "the old punched lantern."

The lanterns carried by the "All's well" watchmen of the eighteenth century were fairly heavy, with a broad bull's-eye, and must have seemed most efficient in those days of unlighted streets, especially in comparison with the uncertain torchlight of the link boys, who had previously cruised about, waiting for a "fare" to light home.

There were candle-lanterns of tin with glass globes almost spherical in shape, as well as lanterns with egg-shaped globes; and these precious old glass lanterns had not the wire hoops, which finally came to be a necessity for the protection of the globes. How so many survived, unprotected, without one crack, is a matter for wonder. There were candle-lanterns of straight sides with tin, or horn frames and glass sides—usually four, but occasionally five or six. There were also candle lanterns, which represented the light-houses of the sea coast, with broad bases of tin and a six-sided glass body, which tapered until it fitted into the smaller bird-cage effect of tin at the top, where in a real light-house the lamp would have been burning.

Whale-oil lanterns there were, in which, behind

a cylindrical globe set in dainty brass, the small round wick awaited the live coal, or "spunk," to call it to life and duty. Almost all these lanterns opened from the bottom, the lower part being unscrewed to release the candle, or wick.

Lanterns were not used merely where light had to be carried from place to place, but also for stationary street-lighting, for entry lighting in public and private houses, and, in the old days of the chimney place, as side-lights for cooking. Lanterns with the long bail were designated as "hand lanterns," or "hand lanthorns," the latter spelling being much in vogue, along with several others, during the seventeenth and eighteenth centuries.

Like many another convenience of to-day, modern methods of lighting have lost to us much of the simplicity of contour and design of the old lighting arrangements, and their resultant beauty.

## X: Tallow Dips and Candlesticks

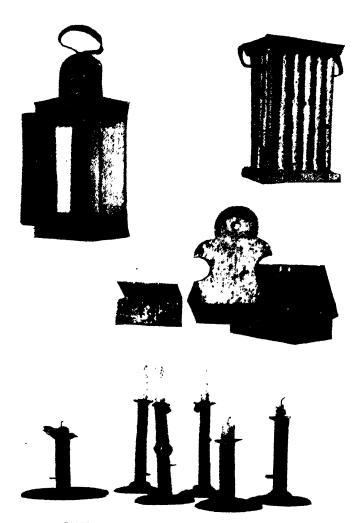
Or all forms of lighting which the ancient and modern worlds have known, surely that of the candle holds first place for grace and charm. The fact that the candle still holds a place of its own, in spite of the coming of electricity, shows that its tiny flame has filled some real demand of the human soul. Coming steadfastly down the ages, spluttering sometimes with discontent, wavering again almost to extinction with the draught from some new invention, it has yet been able to recover its equanimity and, by careful snuffing, burn on with the best of lights.

Some of the early ways of making candles are interesting. For instance: "take a stick, wrap it firmly with moss, apply warm fat and let it harden around the moss, and then wind about this, dry fiber, or wicking." Surely the resultant glow must have been an eye-opener to the early torch-bearer, who had stumbled for many years through brush and tangle with his uncertain light.

Another crude form of lighting was to soak an end of rope in resin and fasten it where it could burn safely.

Bear's grease and deer suet went into some of the first candles which the early settlers made in this country; and then spermaceti, the waxy solid obtained from the head of the sperm whale and, brought to the coast of New England before the middle of the sixteen hundreds. Early, too, came the bayberry candle, made of the boiled greenish wax of the bayberry, and proving itself impervious to warm weather—unmelting, not greasy to the touch, and sending forth so fragrant an odor that the room wherein it was burned, became redolent of the dark-green wayside hedges. Later, candles were made of wax and these were especially "choice," the bits of heated wax being pressed by hand around the wicking, and the light considered most becoming. These were used only on company occasions. Then there was the common "tallow dip," of "well rendered mutton grease"-for some families the only light ever used. In 1840 a sulphur candle was made, which combined disinfectant and lighting properties.

Wicking for candles was of home manufacture for many years, and grew into form on the spinning-wheel. Made of rough hemp and later of cotton, it was spun twice the length of the required candle, and then twisted back upon itself—a candle eight inches long having a wick sixteen inches long for its heart. A material for wicking, which was used in thrifty homes, was the milkweed of the wayside, spun into a coarse string. One old man wrote in the first half of the nine-



LIGHTING EQUIPMENT IN TIN AND IRON
Five-sided bird-cage lantern; candle-mold; tin "Lucifer"
boxes; iron candlesticks

teenth century of a "silk grass, containing a down which may be carded and spun into candle wicks."

One device for the improvement of candle light was the placing of a small straw of rye, or oats, in the center of the wick, giving thus a convenient air space. So late as 1853, methods for improving candles were still being sought and the following was recommended in a current almanae:

"Steep the wicks in lime water, in which has already been dissolved common nitre, or salt petre." We are then assured that the flame will be purer, the light superior, that snuffing will be nearly superfluous, as in wax candles; and that the candles with wicks thus prepared will not melt and run down.

The weather, however, could do as it would with the most improved candle, as for instance:

"Candles often afford prognostics of the weather; when their flames snap, or burn with an unsteady, or dim light, rain and frequently wind, also, are found to follow."

As to-day, the wicks would burn tall and have to be cut off. It was not, however, until just before the middle of the eighteenth century that snuffers were brought into use, and these scissor-like tools were quaint in form, as well as useful. One William Perkins, who lived in 1635, would probably have scorned to use such an unnecessary

implement, for he wrote to one of his friend:
"If a man is to snuff a candle, he will first

spit on his fingers."

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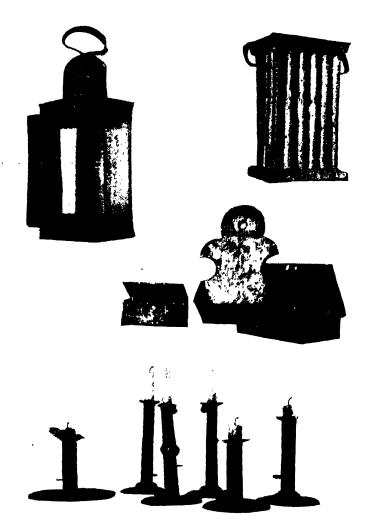
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this country; and then spermaceti, the waxy solid obtained from the head of the sperm whale and, brought to the coast of New England before the middle of the sixteen hundreds. Early, too, came the bayberry candle, made of the boiled greenish wax of the bayberry, and proving itself impervious to warm weather-unmelting, not greasy to the touch, and sending forth so fragrant an odor that the room wherein it was burned, became redolent of the dark-green wayside hedges. Later, candles were made of wax and these were especially "choice," the bits of heated wax being pressed by hand around the wicking, and the light considered most becoming. These were used only on company occasions. Then there was the common "tallow dip," of "well rendered mutton grease"-for some families the only light ever used. In 1840 a sulphur candle was made, which combined disinfectant and lighting properties.

Wicking for candles was of home manufacture for many years, and grew into form on the spinning-wheel. Made of rough hemp and later of cotton, it was spun twice the length of the required candle, and then twisted back upon itself—a candle eight inches long having a wick sixteen inches long for its heart. A material for wicking, which was used in thrifty homes, was the milkweed of the wayside, spun into a coarse string. One old man wrote in the first half of the nine-



LIGHTING EQUIPMENT IN TIN AND IRON
Five-sided bird-cage lantern; candle-mold; tin "Lucifer"
boxes; iron candlesticks

teenth century of a "silk grass, containing a down which may be carded and spun into candle wicks."

One device for the improvement of candle light was the placing of a small straw of rye, or oats, in the center of the wick, giving thus a convenient air space. So late as 1853, methods for improving candles were still being sought and the following was recommended in a current almanac:

"Steep the wicks in lime water, in which has already been dissolved common nitre, or salt petre." We are then assured that the flame will be purer, the light superior, that snuffing will be nearly superfluous, as in wax candles; and that the candles with wicks thus prepared will not melt and run down.

The weather, however, could do as it would with the most improved candle, as for instance:

"Candles often afford prognostics of the weather; when their flames snap, or burn with an unsteady, or dim light, rain and frequently wind, also, are found to follow."

As to-day, the wicks would burn tall and have to be cut off. It was not, however, until just before the middle of the eighteenth century that snuffers were brought into use, and these scissor-like tools were quaint in form, as well as useful. One William Perkins, who lived in 1635, would probably have scorned to use such an unnecessary

implement, for he wrote to one of his friend:
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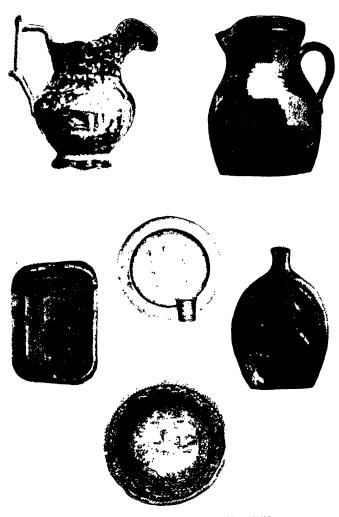
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PEWTER, GLASS, TIN, STONEWARE AND CHINA

Staffordshire ewer and brown stone cider jug; tin tray, pewter platter and cup, George Washington flask bottle; Staffordshire basin

## XI: Board, Sideboard and Pantry

Those forefathers of ours, who came early to America and put good muscle and brain into the settling of the land, did not imagine that they were being picturesque. They had no idea that, after three hundred years had passed, there would be people—and among them some of their own descendants—who would seem to believe that those days were lived, solely that they, of the greater discrimination, might be able to collect "antiques."

But, discriminating as we consider ourselves, we put too little thought into our collecting. To buy a quaint dish at an auction and carry it home in triumph, is not enough; and the person, who is the rightful custodian of old treasures, is the one who sees in each one, the ingenuity, work and spirit, which went into its evolution. "Evolution" is perhaps the best word which can be used in connection with these old things, for they were, in truth, an unfolding of raw material into useful, practical, and often very lovely objects.

The simplicity of hand production is shown most clearly, perhaps, in early dishes and serving utensils. The pottery of the red man seems to have been a step beyond the white man, but his burl bowl, scooped out of a knotty growth on some old tree, was something that the white brother could accomplish. This burl bowl was set in the center of the board, within reach of all, and would serve as big a stew as the housewife was able to cook in her great iron, or brass kettle.

Forks had not come into general use, even in the old world, when our first settlers arrived, nor for some years after; and it was only necessary to hollow out a few spoons from some soft wood, or to fasten clam shells to convenient sticks (if one had imported no family silver) before the family could be busy at their task of eating.

Some of the containers for food and drink which seem crudest to us, were used, not only at the very first, but well along in those years when we have supposed that living conditions were well taken care of. Gourds—for water glasses, comports, water bottles, dippers and even "basons"—were in use for many generations, and in some localities until the middle of the nineteenth century. Horns were also used for cups and water bottles, long after the first days of dire want.

Skins, as receptacles for carrying water and "black jacks," or mugs made of leather and often bound with metal to make them firm, may claim real antiquity, and were certainly examples of the clever use of raw materials.

It was to the trees, as usual, however, that the pioneer turned for the real outfitting of the family board. The dining table of early America was

in reality nothing more than a board. A table the proper size would have been entirely too large for a one-roomed house, and a broad, thick board was therefore substituted, which could be fitted on top of trestles, when meal time came around, and moved out of the way when the meal was finished. Some tables were made with hollows scooped in the board, a foot and a half apart, all around the edge, where the individual trencher would ordinarily have stood. Some such device would be a boon to-day, as a relief from dish-washing, for this old board could be removed from the trestles, given a dousing, and set up to drip and dry.

"My folks used to use this little trencher, when I was a great girl." The old lady who spoke is in her nineties; and the trencher in question is a little wooden plate with a slightly raised rim which shows the knife marks of many generations of users. The large trencher, used in the middle of the table, was piled high with food for all; and the name given to the over-hearty eater in the late seventeen hundreds was "trencherman"—a scornful expression, used much as we use the word

"gourmand" to-day.

Trenchers were made of poplar wood and of the roots of the yellow ash. White birch was also much used in the making of wooden dishes. When a man specialized in the making of wooden dishes he used the lathe for his work, and thereby won for himself the name of "dish turner." The dish turner made his wooden dishes in sets of a dozen or more trenchers, plates and "sasers."

The names given to these old wooden dishes are delightfully foreign in sound. The name "piggin," while commonly used in New England for a small milking pail with one stave elongated for a handle, was also given to articles of the dipper variety, although the "skippet" also had this distinction; the "skeel" was a shallow wooden vessel in which milk was set, while the cream gathered; the "losset," also, was made for holding milk and the cedar "keeler" had the same responsibility. The "noggin," a small bowl, or mug, with a short heavy handle whittled at the side, seems to have retained its quaint name longer than the others and traveled right on down into the memory of people still living.

When it came to the drinking cup, we find it in the nature of a community affair, within the circle of the family and its guests; and the great wooden tankard, made of wooden staves and coopered with withes, was passed from mouth to mouth.

Sometimes of silver, sometimes of whittled wood, later of glass, the old salt cellar, or "saler," or "standing salt," had its place at the center of the board, a custom derived from the early English, whose guests of honor sat "above the salt" with the family, and whose retainers were placed more humbly "below the salt."

Pewter, both home-made and the article of

commerce, had a place in early days, for before the seventeenth century had closed, Boston had its pewterers. This beloved old ware gradually crowded out the dishes of horn and wood, but while horn succumbed with a good grace, wood proved a more obstinate opponent and we see wood and pewter being used together for many years.

The best pewter was made of tin with as much brass as it would absorb, while the more usual quality was made of tin and lead. It is this last which we have come to love, among the old pieces which have come down to us. Pewter of the finer quality went into tea sets, lamps and candlesticks, and these have made the trip down the generations with rather few scratches, although the muchused pewter plates and mugs are often hammered and dented and scratched in a way to make them dear to the heart of the antique lover.

It is because much of the colonial pewter was a home-made product that we are considering it here. That which was imported, while undoubtedly fine, did not show the skill and contriving of the early settler and is therefore out of the province of this book. The molds, into which the home-made alloy was run, might be of gun-metal—rather too expensive—or of plaster-of-paris, or iron, or wood, or sand. The lathe was composed of the head-stock, the tail-stock and a simple mandrel, or steel spindle; and the man, or boy,

who turned the lathe was called the "turn-wheel." When the article had been cast, or hammered, or both, it was put upon this lathe and burnished. The laws which existed among the pewterers themselves, to insure the upkeep of a certain standard of excellence in their craft, were extremely rigid; and a pewterer who attempted to solder on the ears of a porringer, as he would the ears, or handles, of other articles, found himself in hot water at once.

These dainty little porringers were the dishes in which children had their bread and milk, in summer, and their broth and bean porridge, in winter; or, when children were not allowed to sit at board with their elders, porringers were convenient for a standing meal. Although their form originated in England, they were not called porringers in that country, but rather "tasters," or, in very early times, "bleeding basins," showing that they had other than table uses.

The handle-less pewter cup is one of the waifs which still turns up unexpectedly; it is nearly always of the leady variety and consequently well bent, or dented, and generally very dark in color. It is said that one of the old-fashioned cures for "distemper" among children claiming to be too sick to go to school, was the alternative of cleaning up the family pewter; and often the suggestion was all that was necessary to accomplish an immediate recovery, for this task meant scouring

with rushes, or horsetails, and a vigorous application of "elbow grease."

The following terms, applied to different sizes of pewter pitchers, ring with a chime of the good old days and are worth remembering: the gallon vessel, or pitcher, was the "gallonier"; the "pottle pot" was the two quart size; the "pot" signified a quart measure; while the "little pot" told of the pint draught.

When times became a bit more easy, the pewter castor came into use for the center of the table, and would swing its circular form about at a touch from the seeker of pepper, or salt, mustard, or vinegar. The bases of these castors were sometimes made of the better grade material, while the upper part would be of the more pliable kind.

Pewter platters and plates were always round, the long shape for platters not coming in, until the arrival of porcelain. One of the uses of pewter was for covers of earthen tankards, or syrup pitchers; and sometimes the edges of heavy white stoneware pitchers were rimmed with pewter, as a protection against breakage. Basins of all sizes were made of pewter, salt cellars, cider pots and water dishes.

Following horn and keeping company with wood, pewter borrowed its manners from them and walked softly through life, with little noise and no clatter. The memory of the quietness of pewter, in comparison with the noisier porcelain, made some people dissatisfied with the new tableware.

About 1841, a pewter substitute, or improvement—as some then thought it—came to the eye of the public, and Brittania ware crowded itself in. This was supposed to be a step forward in culture, but those who are familiar with its storemade sheen deplore its coming and turn away from it in weariness.

The coming of china dishes and porcelain-ware was synchronous with the Revolution; and, just as pewter displaced the horn and cruder wooden dishes, so porcelain displaced pewter. The Revolution itself had a great deal to do with the abolishing of this soft, quiet old ware, for when the patriot forces found themselves in need of bullets, pewter parties were given by the colonial dames, whereat all of the household pewter which could be spared, was offered up and later melted into bullets. Again, old pewter plates and platters had always found new birth by being turned into spoons; and these, in turn, when old age descended upon them, became articles of some smaller size.

Of the imported Wedgwood, Staffordshire and and other English porcelain and pottery, we may not speak at length here, for they represent in America only an ability to buy; and, while that ability is hardly one to be despised, it is not the one which we are considering. That porcelain, however, which grew under the fingers of the far-

mer whose wife needed, or badly wanted, perhaps, some dishes like those her relatives had "down Boston way," the material for which came out of the clay pit, or rocks, on this farmer's own land, belongs with those objects whose existence proves the resourcefulness of our forefathers.

"We had a neighbor man, back in the fifties," says an old man now living in New Hampshire, "who made his wife a grand tea-set out of old Beryl Mountain. Wood and pewter was n't quite good enough for Amanda's best dishes; and so Jim-James Bowers, his name was-set to work. and if you believe it, he broke up the old spar (feldspar) and pounded it up and mixed it some way-I don't know just how-and first thing you know, there they all was, a cream jug, a waterpitcher, a butter-dish and a sugar-bowl, as smart as you please. And then, if he didn't figger someway, so he got a gold band on all those things, and maybe Amanda was n't proud! No, I don't know as she was so proud of Jim-it was the dishes."

"Clay-earth" was the name of the substance which made home-made dishes a possibility, or kaolin, a pure white clay which formed the paste of the early porcelains. With this was mixed finely eroded quartz, feldspar and mica. And since New England, in certain sections, was first fused together with an abundance of these substances, it was not a hard task for a man to go out and dig

in his dooryard for his new dishes. Not hard to find and dig the ingredients, perhaps, but rather a task, if he were to bring to completion "some of those new-fangled noisy dishes, that Amanda thought she must have to be stylish."

The care with which dishes of this new kind were cherished, is shown by the custom of having the tea cups washed at the table by the lady of the house, rather than run the risk of breakage in the kitchen; and this was done by the well-to-do, who might easily have made good any damage. One extra-careful housewife on a New England farm had two sinks put into her kitchen, one in which the heavier farm pots and kettles—and also the men's hands—might be washed, and the other for the washing of her china.

The methods of mending china, or pottery, were also of home-made evolving. One was the beating of flint glass to powder and then mixing it with the white of an egg, this mixture being guaranteed to keep the broken edges forever together. Some of the dishes were mended with yellow clay, put on in great blobs; and one old yellow cream pitcher was mended in the bottom with lead, run in and hardened. Too choice and unusual this old porcelain was, to be thrown away, because it happened to get smashed. On the top shelf of the pantry, these well beloved, though broken, pieces still stand in many homes.

There were old names for dishes used in the

sixteen, seventeen and eighteen hundreds; and, while they began when wood and pewter were in use, they were in many cases applied to porcelain, as well. The "bason" was of course our basin, or bowl; the "ewer," or "jug," was our pitcher; sugar bowls were called sugar boxes, or pots; and saucers were "sasers," without question. "Twifflers" were pudding dishes; "sneak cups" were small handle-less cups; while a "nappy," a word still heard in farm sections of New England, was the vegetable dish, or bowl, with a flat bottom and slanting sides.

Some of the old earthen ware was extremely fine in shape and coloring. Cider pitchers, standing a good twenty inches high, of deep brown ware highly glazed, are of this family; and brown earthen bowls, which might have been called trenchers-so flat and spacious they are-are another splendid offering. Demijohns of every color which earth can achieve, smartly decorated with a dashing whorl of floral design in varied blues, are well known to us all, but far too little noticed, or appreciated. Yeast-pots; open bean-pots in yellows, browns and black, with or without handles: vinegar jugs and molasses jugs-all had their distinctive shapes and bearing. Some of the stone crocks, which used to be kept well filled with cookies, or doughnuts, and needed to be therefore air-tight, had heavy earthen covers. One lovely old one has a flat earthen handle in the center; and

around that there has been dashing, for at least eighty years, a mad hunt, the men on horseback and the hounds in between, necks down and tails out.

In the pantry, also, was kept the old stone churn, eighteen inches or more high, with its earthen collar with a ruffle for a top, and its strong wooden dasher. The stone meat crocks found their standing room in the cellar, rather than in the pantry, where they were a great convenience to the farmer after the "killing," and were large enough to put the whole calf, or sheep, in alive, if that had been desired.

Although we hear little of the use of iron for serving food, it was yet used. Some of the old porringers were made of iron, with the handle cast in as quaint a design, as though it had been made of brass. Fine old mortars for grinding spices and roots were often made of iron; and these, as they stood on the pantry shelf, showed various but always good lines, with their pestles of iron standing at an angle or, if the mortar sported a heavy wooden cover, sedately erect.

Copper and bronze, among the very oldest of food servers, and their more modern sister, brass, had their place on the family board, as well as on the sideboard. Generous cups, with brass handles fastened on with copper rivets, were used; brass and copper basins were rather usual; and there were large tureens on tiny legs, made of





FROM THE PANTRY SHELVES

Vinegar jug (note bird decoration), preserving jars, cider pitcher, cooky crock, bean-pot; (Below): Light blue, floating blue, mulberry, black and white, and banded china

these materials, and tiny brass kettles, as perfectly made as their larger sisters which hung on the crane. These latter were spoken of as the "two pail," "three pail," or "four or five pail size," as the case might be.

Many of these fine old brass kettles came with the first settlers to the new world and were among their most precious possessions, but others were made in this country, of sheet brass, and were hammered, or wrought, into shape, rolled over along the edge and fitted with an iron band around the top. To-day we tremble at the thought of having our food prepared in brass utensils, but our forefathers used them constantly; and, indeed, for boiled cider apple sauce, the brass kettle was the only one possible, since iron turned the sauce black. However, there was an endless amount of work connected with the use of brass; and in addition to the polishing which the brass kettle received, it must always be washed before using with salt and vinegar.

Of the ways of cleaning another kind of tableware we may speak, although it is out of the province of this sketch to tell much of the thing itself. Silver was not in the hands of the ordinary farmer, or home maker, and it was not at all necessary to the comfort of their lives. It was sometimes acquired in small quantities, through inheritance, and housewives discovered one very simple way of keeping it bright. "Clean silver in lobbered milk by letting it lie." Surely this was one of the few ways in which results could be obtained with the minimum of labor, and we know this old recipe to be an honored and much used one, still in use in some places. Silicon, a soft white material which brightens without scratching, was found where trees had been uprooted, and, in the disturbed earth, it showed in white streaks. It was burned in a kiln and was then ready for use. To us, the progeny of those early forefathers, the evolution of silicon is more important than the date of the first importation of those articles which it was destined to brighten.

Of old tinware, there is not much which has survived the years. At the time of the Revolution, or slightly afterward, tin commenced to grow somewhat popular; and among the oldest things which were home-made, hand-wrought in tin and fashioned for use on the family board, are the old candlesticks with circular tin reflectors. In the pantry, the sausage-gun of tin shot the fresh sausage-meat into its retaining skins; tin graters were the only kind-unless it were iron-and these were made of flat pieces of tin, punched full of holes, with the rough edges left all on one side, and the tin then rolled around and fastened into cylindrical form, or made in a half cylinder and nailed with "tack nails" to a narrow piece of board, with a handle whittled at the top.

Sieves, always home-made and of tin, were achieved in much the same way as the grater, although they were formed into the shape of a pan. Some of the earliest tin pie plates had unusual curved bottoms and interesting indented designs; and those which have escaped the rust of the intervening years respond to a polish far more brilliant and lasting than the tin of to-day will allow. There were old tin boxes and money safes, and there was the "dredging box" for sprinkling flour on meat, while it was roasting.

The cutlery used at the board and in the pantry, the ancient use of spoons and the tardy arrival of forks, are subjects interesting enough to be treated by themselves. Suffice it to say, that spoons and knives were used for eating purposes before the fork was even dreamed of, and that it was not until after the arrival of our first settlers, or in the second quarter of the seventeenth century, that the first fork was brought to America. These three associates, knives, forks and spoons were as simple and quaint in their style and line, as the dishes with which they were used and, like them, were shaped out of the raw materials which happened to be at hand.

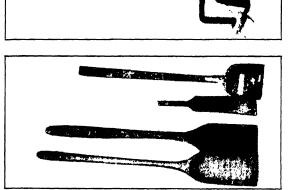
We can only regret that time, hard usage, the demands of war and the scarcity of their numbers, have deprived us of the joy of having more of these old treasures of the board, the sideboard and the pantry.

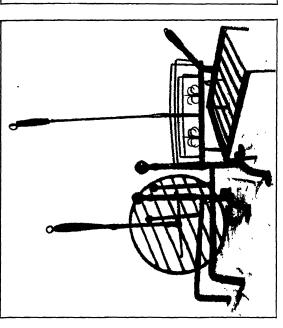
## XII: Pioneer Knives, Forks and Spoons

Ir has been said that "spoons are as old as soup," and while it is possible that early man and his wife drank their first broths and brews, it is probable that spoons did come into existence among the earliest conveniences. Spoons "came over in the Mayflower," but this does not mean that metal spoons came in such quantities that all the early settlers had them in abundance, or, in some cases, had them at all.

Since we are more interested in the home-made devices of those early days than in the articles which arrived by ship from the old world, the first American device for a spoon appeals to us for the ingenuity which it represents. "Something out of nothing" might have been the slogan of the home maker in those days; and a sea-shell spoon, bound with thongs to a split stick, wins our admiration, as does also the crudely-hollowed wooden ladle, or spoon, which was one of the first home-made products.

The spoon in vogue in England in the early seventeenth century had the baluster stem and decorated head, or knob. Spoons of this style must have been difficult to hold, since there was so little





COLONIAL COOKING AIDS

Syrup paddles; square and revolving gridirons, toaster, andirons with fire-dogs attached; brass and iron tasting spoon

of the slender handle to grasp. The bowls had evolved somewhat from the older circular form and approached the elliptical, although the end was still broader than that part near the handle. They were called "plover eggs."

Following this style, the spoon took on the shape which is familiar to us to-day—although it had its variations—with the more or less ellip-

tical bowl and the flattened handle.

Handles were grooved, or plain; heads seal-shaped, cleft, flattened and rolling up, or thicker and rolling down; and the rat-tails were longer, or shorter, as the case might be—but the modern-shaped spoon was easily recognizable in them all.

Some of these spoons were of silver—especially along the coast where the sea captains brought in their treasures at the end of a trip—and it was from them that the home spoon-maker took his

styles.

In the supplying of these very necessary implements for "board" equipment, pewter played an important part. It was not a difficult task to have a "running" of spoons, every once in so often, for there were spoon molds in many families, and always one in the village which might be borrowed; and there were generally old pewter plates, which had grown bent and too much scratched, which might be melted and run into spoons.

The spoon molds were made of wood, iron,

pewter, or brass, and were simple affairs, the upper and lower parts fastening together in fitted grooves. Laurel was much used for making spoon molds and was often called "spoon wood."

How few years ago it was, that these "antique" implements were in use, is brought to mind, when we hear a woman, who has but recently celebrated her golden wedding up in the mountains of New England, recalling those things with which she set up housekeeping.

"My mother-in-law was a very careful house-keeper and the first thing she did, after I was settled, was to drive to store six miles away and buy me some pewter teaspoons. When she gave

them to me she said:

"'Now you put your good silver spoons away and save them for company—these pewter ones are plenty good enough for Cleon and you to use common.'

"But do you know, I just wouldn't do it! Said I, 'I cal'late I'll enjoy using them as much as somebody that might come after me.' She was pretty iffy, when I told her that I was going to use them in the kitchen, and she did n't think much of my housekeeping after that."

Pewter was a perishable material and some of the old pewter spoons which were designed for hard use, had a strong iron rib down their handles, for reënforcement. It was the wooden spoon which did most of the hard work in the home, the stir-

ring and beating and whipping.

There were fine, smooth old paddles of various spoon-like shapes: paddles of pine, for lifting and airing the syrup at sugar-making time; paddles of cherry, for butter making; also the famous "pudding stick" of slender form and ancient uses.

"Alchemy spoons" were of pan brass and arsenicum, of heavier weight than the pewter, and much used in the latter part of the seventeenth

century.

The "tasting spoon" was used for testing the contents of the deep brass and iron pots, which hung from the lug-pole or crane. One of these was made with a hammered iron handle, long and slender, and a shallow bowl of hammered brass fastened to it with copper rivets.

Within a few months, two old iron spoons have come to light. The handles are extremely slender, the bowls dainty enough for an invalid, and along the handle of one is the faint tracery of a growing

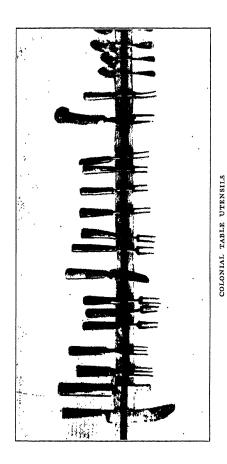
vine, done with some fine instrument.

The first fork which came to America was for Governor John Winthrop and it arrived in 1633. Encased with a bodkin and knife in leather, it was naturally considered a great luxury, if not a real joke. The latter part of the sixteenth century was witnessing the use of the fork in Italy to a small extent, and some of the "spruce gallants"

of England had also become familiar with it, although the habit was much laughed at. Naturally, the simple people who came in the "Mayflower" were not yet aware that the nicety of eating with their knives, or with their fingers, if need be, had been questioned, and it was not until the sixteen sixties that a few more forks, two-tined and of iron and silver, crossed the ocean.

Some of the simplest forks used by the ingenious pioneers were of cane, sharpened to two points. Some "turtle shell tackling" on knives and forks used in 1718 was undoubtedly of foreign manufacture, but all these importations made their mark on the imitative and ingenious minds of the settlers here and had an ultimate result.

The growth in forks, if one may call it so, is easily traced. Undoubtedly the spear, or bodkin, with its single point, was the first fork. "Flesh forks" were long and slender with two tines, sometimes running close together and sometimes spread rather broadly apart. When forks came into use for conveying food to the mouth from the trencher, their handles grew shorter, the tines more slender and, at the back of the early fork, a high ridge ran across between the tines and the handle, apparently to keep the food from falling off the fork if it were not speared, or to aid as a "pusher" for gathering up the food. These ridges gradually grew lower and less conspicuous, as the fork grew in wisdom, until to-day we see no sign of it, but



"Duck-bill" knife: razor-blade knife with wood-and-lead handle; early forks; iron and pewter spoons

rather a greater curve in the shape of the tines themselves, to facilitate the lifting of food.

In 1738 the three-tined fork appeared, and as the finer steel came into use, we find this style of fork being used more and more generally. Sharply pointed in their original shaping, and more pointed from frequent polishing and use, with handles of bone, or wood, or horn,—the two former materials being fastened on with tiny brass pins-these forks are really dangerous weapons, quite too dangerous for the use of a child, or a careless person. Forks of the three-tined variety are not at all rare, for in the country districts they are still in use, or have been abandoned only a few years. The sturdy, two-tined iron forks of the earlier years are, however, rather difficult to find in any numbers, and with their quaint handles look really ancient. The most beautiful of these old forks are those of the pure white bone handles, with steel as white as silver, while a close second are the green bone ones with their dainty waists and terrible points.

Knives just naturally came into use at the "board" because they were necessary. The very old knives for "hewing meat" were of a slender, piercing shape, and these were fitted into wood, bone and horn in various ways. When the habit of sticking a long knife down one's throat commenced to be considered a bit crude, the "duck-bill" knife came into use, and food was scooped up and con-

veyed to the mouth with a less threatening gesture than had before been necessary; broad and blunt at the end, and curving back to make a greater carrying space, these duck-bills were yet peculiarly

slender, where they approached the mount.

While most of the old knives were more slender and pointed than the knives of to-day, there were some which were made with a perfectly straight end to the blade. Three fine old specimens—of course of the home-made variety-which have come to light recently are made of razor blades, fastened into hand-whittled ash handles with a melted lead mount. These mounts are extremely interesting, not only because of the way they are achieved, but because of the unconsciously lovely results. One end of the handle was grooved and cut into shallow channels, in designs which smack of the red man's art, and when the blade was inserted, the melted lead was run around and through these channels, leaving, where it hardened, a silvery ornamentation of great beauty.

There was probably not a single old razor blade which did not end its life as a knife blade, or a shed hook, or some other equally useful articlethat is if it had lived on a farm—for steel was steel and not to be lightly thrown away. As in other lines, it is the product of ingenious man in

need, which is most interesting.

The bowie knife, which was worn at the belt in pioneer days and later, is sometimes a gem of workmanship. Made of file steel, which was the best of all steel, these knives were made with a blade broad near the handle and gradually narrowed down to a point—which was sometimes convincing in an argument, it is said. One knife of this kind is fitted into a heavy wooden handle and has a fitted iron hilt, the width of the hand, for protective purposes. This knife slips into a heavy rawhide sheath, cut and hand-sewed to follow the graceful lines of the blade, bound at the top with a broad facing of lead, an inch or so across, and finished with leather trappings which allowed its being carried on the belt.

The ancient Barlow jackknives, with their strange and graceful shapes, were undoubtedly used by many men as table implements, but it is hardly in this capacity that we think of them, but rather as the tools with which a multitude of necessary utensils were whittled by the men and boys of the early days.

From such home-made, or home found, materials as clam-shells, cane, hollowed wood, bog-iron, bone, horn and an occasional metal, the knives, forks and spoons of early America were made. Not only did these simple utensils fulfil their mission, but they have survived the years; and, whether with blemish or without, are dear to us, not only as witnesses of great ingenuity but, in many cases, as works of art.

## XIII: The Lore of the Weatherwise

"I HEARD a whip-poor-will a-whipperin' las' night, and that might mean a spell of weather." So speaks the Middle West, looking for rain.

"When the whip-poor-will calls to us from the pasture, night after night, we know we're in for a spell of oncommon good weather." Thus answers

New England.

That such opposing prognostications can be deduced from the same "sign" gives us a moment of wonder; and yet, when as children we were told that "red at night is sailor's delight," we remember that we wakened sometimes, after a glowing sunset, to hear the drip of rain on the roof. Later we learned that there are different kinds of red which paint the vast spread of the evening sky, but in our childhood we wondered over grandfather's weather signs and his unassailable faith in them, in the face of frequent disappointment.

"Give us a sign from heaven," seems to have been the cry of man, since first he slept under the sky at night and watched the moving panorama of the stars. To the signs emblazoned before his eyes he raised groping hands and, through succeeding

THE CHIMNEY PLACE

years, plucked for himself mathematics, astronomy and other sciences. Down on the earth, however, he was forced to look for his food and remembered that only through the rainfalls and the sun could he hope to find it. Back again to the heavens he went and, watching day after day and night after night, commenced to read and interpret the clouds and the winds, as well as the stars. Slowly another code of signs was discovered but, unlike those which had given him number and measure, this new code was inexact, and promise of fair weather often brought a squall, or a downpour.

There are, however, some signs which they tell us "never fail": "Mackerel sky, rain is nigh"; "Open and shut is a sure sign of wet"; "Dew on the grass, a fine day to-morrow"; "Rainbow at night, fair to-morrow"; "Red in the morning, sailors take warning"; "Red at night, sailors' delight"; "Cobwebs on the grass mean a sunny day"; "When the wind is in the east, it's neither good for man nor beast"; "If the sun shines out before the roofs are dry, there'll be more rain"; "If it rains while the sun's a-shining, there'll be more rain"; "When the sun goes down an orange ball behind the hill, we're in for a drought"; "When 'tis foggy in the morning, 'twill all burn off afore noon" and "When the locust shrills his call, 'tis going to be hot."

Then the clock enters the game and we find that "Rain before seven, it'll clear before eleven":

or, in other words, "Rain between daylight and sun-rise, there will be but little rain." Again, "If the rain begins at midday, or midnight, there will be six hours of rain, more or less." We learn, also, that "If the water boils away too quickly, it's coming on to rain"; and that "If the wind beats the smoke from the chimney to the ground, it will rain before long."

One of the oldest weather signs is a heavy harvest of berries and nuts, which always portends a severe winter. Long needles on the pine trees are a sure sign of a good fruit year, meaning neither too much rain, nor too much drought. Frequent displays of the aurora borealis in August mean a cold winter; and when these northern lights sing "like rubbing fingers along a silk hand-kerchief," look out for a real old-fashioned blizzard season. Clouds to the north of the sun at sunset mean rain, or wind, while clouds to the south mean a fair day to-morrow; and happy is the way-farer who sees, at the start of his journey, white fog caressing fresh river, or pond, for there is a fair day before him.

In the old days of Shank's Mare, or the Dobbin buggy, it was easy to prolong the slow trip home by stopping to count the stars, which dimly twinkled out from within the "ring around the moon"—one day, two days, until the storm should come, but after all, who cared? Drive on a little slower, old Dobbin.

Many villages have their own weather signs. That they sometimes fail does not seem to lose them the faith of the neighborhood; and the probability is that, as a rule, they are reliable. In one farming village, the nearest hill peak to the east gives the forecasts of rain: "When Dame Messer's got her nightcap on, it's going to rain," one old resident volunteered; and usually a short time after the lacy cap of cloud has gathered on the peak, drizzle will begin to fall. Near the White Mountains one village knows it is going to rain "when the mountain comes on to roar." In another locality, the old folks listen in the late winter for one unfailing sign and, when through the hills there comes a reverberation like the prolonged roar of a mountain lion, they nod their heads and say: "There now, the pond's a-roaring, they's going to be a thaw."

In another mountain-girt village, the children of a certain family may never "leave off their winter flannels until the snow is off Ascutney," though sometimes it grows warm in May and still the snow lingers—as well as the flannels.

Some men there are who, going about the earth free-footed, look to the earth for their signs, or to those fourfooted friends, who are sometimes wise with a wisdom beyond that of men. Is there a tree-toad camouflaged among the green leaves and calling insistently? Then almost we can hear the raindrops falling in answer.

"Yes," said one hard-working farmer's-wife, buttoning closer her "hug-me-tight," "I cal'late it will snow; the hens has been curling up and pickin'." To her it was an unfailing sign, while according to her neighbor down the road, the hens were only oiling their feathers. But why is it that, so often just before a storm, the hens know that their feathers need oiling and betake themselves to their beauty parlors? Perhaps they have rheumatism like us humans and "feel it in their bones."

Starting in the early spring, we hear the first call of the peepers down in the swamp. This is "mud time" in the country; and we know that those same dear little voices must be frozen out three times, before the spring may come to stay. To the children in the district school the first peeper means "three weeks to bare feet."

But even before the spring has come, we are told how soon to expect it, for Candlemas Day arrives. Those famous twenty-four hours which come on the second of February, and are best known now as Ground-hog Day, have a veritable wreath of wisdom wound about them. On that day the lumbering woodchuck comes out of his winter hole, turns himself slowly about and, if he sees his shadow on the ground, goes back for six weeks more of good, uninterrupted sleep, with no alarm clock to disturb him; if, however, he sees nothing but drear, bleak landscape, he stretches

himself to get ready for a real waking up. And when the ground-hog wakes up—behold, spring is almost come. An old man who was born in the late seventeen hundreds, knew this sign to fail only once in fifty years.

And yet there is a saying which seems to belie it, for, when the farmer looks over his supplies in hand about the first of February, to see if he has enough substantials to see him through to spring, he hums this couplet:

"For, you know, on Ground-hog Day, "It's half the wood and half the hay."

Carefully set down for posterity, we find this bit of Candlemas wisdom, "Where the wind is at sunset Candlemas Day, there will be its home for two months. It will never be away from home more than forty-eight hours at a time. Should it be north, or northwest, look out for cold weather."

Then to sum it all up in the quaint language of other days:

"The hind had as lief see his wife on the bier,
As that Candlemas-day should be pleasant and clear."

In the summer the farm lands fairly seethe with signs and sayings about the weather. When the cows lie down in the pasture early in the morning, it is surely going to rain; when the flies bite and will not be shooed away, it is going to rain; when the hens stay out in the rain, it will not clear

soon; if the English sparrows and the swallows fly in flocks and swoop in low circles toward the ground, it must rain before long—and this sign is an easy one to read, for we know that, when the air is heavy, insect life is always close to the ground; and, if there is an unusual abundance of skunks about the farm-buildings as the summer wanes, the winter is to be severe.

The fall takes many of its signs from the animals and one of the surest, in the open country where there is water, is the height of the muskrat houses. During one late autumn, an unusual number of muskrat houses appeared along a freshwater way, the houses running from three to seven feet in length, and from two to three feet high. The word went forth through the countryside; and, when the time came for "banking" for the winter, the weather-wise were "more than common" prepared against a hard winter, with higher banking about the house and extra wood in the shed. Heavy fur on wild animals is an undisputed sign of a rough winter; and early migration of the birds is universally accepted as a sign of an early fall.

"Birds going south this early?" grumbled one old man, "Why, the years is getting to be nothing but nine months of winter and three months of late-in-the-fall."

Molting time comes and we are guided by the following:

If the cock molt before the hen, We shall weather thick and thin, But if the hen molt before the cock, We shall weather as hard as a rock.

So numerous to-day are the aids to weather prophecy, that it is hard to realize how entirely the people of the old days were dependent upon their own observations, if they would be forewarned against a spell of weather. There were no telegraphic messages arriving constantly from all parts of the country, to make a central weatherman wise for the good of all, and, barring the barometer which was too expensive an instrument for the ordinary home, the weathervane on the nearest barn was man's only mechanical aid.

The earliest form which the weathervane took in this country was that of the cock. Symbol of the early riser, this strutting fowl viewed the land-scape o'er and, nimble on his well-greased swivel, turned his proudly tilted comb from east to south, from west to north, with every breeze that blew. "As fickle as a weathercock" is a well known saying, but it seems unjust to lay all this opprobrium on the cock alone, for when later, prancing horses, sea-serpents and even the unbending dart took his place, they acted quite as reprehensibly.

As one of our modern poets has said:

Whatever chance opinion be about, John Weathervane is sure to find it out; He holds no fixed opinion of his own, Except the one the latest wind has blown.

But, even though the squeak of a turning weathervane could be heard in the vicinity, the farmer and the wayfarer still looked about them for other signs to guide them in their weather wisdom. Would the barns be full, or yawning? The highway aflood, or basking in the warm sunshine? There must be some sign to tell them.

It is not strange that man looked to the moon for his further wisdom. It did not take him long to realize that the September moon, when at the full, would probably bring the first devastating frost to tender garden stuffs. Believing, as he did, that soap must always be made on the increase of the moon, or it would be thin; that beef and pork must be killed on the increase of the moon, or the meat would shrink in the cooking; that brush must be cut in the old of the August moon, or it would quickly replace itself—he recognized a power in that pale orb, which was not to be overlooked. If "on the day of the full of the moon, the greatest quantity of spirit is sent up into the fruit of the orchards," why should not its every change affect the weather? Thus, according to some, the weather for the following week would be as that which prevailed at the quarterly changes of the queen of the sky. Others, more precise in their reckonings, determined the weather for the following week by the exact hour at which the moon changed.

In an old copy of the New England Farmer's Almanack a table is given with this reassuring caption:

## A TABLE FOR FORETELLING THE WEATHER THROUGH ALL THE LUNATIONS OF THE YEAR FOREVER.

Then comes the following explanation:

This table, and the accompanying remarks, are the result of many years' actual observation; the whole being constructed on a due consideration of the Sun and the Moon in their several positions respecting the earth, and will, by simple inspection, show the observer what kind of weather will most probably follow the entrance of the moon into any of her quarters, and that so near the truth as to be seldom or never found to fail.

The table follows, laying out the day into twohour periods, and giving the weather which will occur, either in summer, or winter, according to the hour in which the lunar changes occur. The first two paragraphs are interesting.

The nearer the time of the moon's change, First Quarter, Full and Last Quarter, are to Midnight, the fairer will the weather be during the seven days to follow.

The nearer to Mid-day, or Noon, these phases of the moon happen, the more foul, or wet, the weather may be expected during the next seven days.

Probably there is no one, who has spent any length of time in the country, who has not learned to watch for the "wet," or "dry" moon as it appears each month, a tiny crescent in the western sky. According to Indian lore, if the moon is tipped up enough to hold a powder horn on its point, the month will be a dry one. The white man would have the moon tipped enough to hold water in its curve, less than this causing a constant dripping to the earth throughout the next thirty days; or again, he would have the crescent hold a halter, were it flung across it.

There are several old prophecies about the snow which are interesting. Back in 1822 they called "a snow year a rich year" and read its coming, not only in the signs already mentioned, but in those first flakes which flurried in and out among the drying bean-shooks and rattling beech leaves. With this little recipe well learned, it was easy to tell if the home was to be weatherbound and how deeply the family must burrow in, for the long cold months ahead.

"Note the day the first snow falls; and to that add the age of the moon the day that it falls, and the product will be the number of snows to come that year." If the wind lay in the northwest, the snowfall was sure to be a deep one; and if it commenced about high noon, or one o'clock, you could be doubly sure that the storm would be a heavy one. Then, when the flakes had stopped fluttering down and the paths were being dug through the drifts, one had but to watch the branches of the trees, and if the snow dropped from them before the sun came out, one knew that the next storm would surely be snow. If there were no trees close enough to watch, one watched the barn roof instead, and if the snow blew off that, the sign read the same.

The farmer coming in to dinner after a winter storm would perhaps see the boughs of the trees coated with ice, and smile in appreciation of the bumper crop of apples he would have next October.

In following weather prognostications, one of the handicaps with which our fathers had to contend was the shortage of calendar conveniences. The yearly almanack was practically the only calendar in the ordinary home and that of Robert B. Thomas, "The Farmer's Almanack," published in 1792, was one of the first to become a regular annual visitor. Many of the signs, such as those centering about Candlemas Day, depended as much upon the calendar, as upon the weather-vane.

There is in existence a tiny pencil-shaped calendar of willow, whittled out at the chimney-corner

during winter evenings long ago, containing the numbers of the days of the week, as well as those of the days of the month, which, when twisted about upon itself, shows us how the owner, by advancing it one square each day, kept himself informed of the flight of his days.

This man had no clocks within his home, and still in his eastern windowsill, after a hundred years, the brass sun-pins stand, which told him when ten o'clock had come around and when noon

hung overhead.

With these helps, he followed also such guide-

posts as the following, published in 1822:

"March in Janveer, Janveer in March, I fear"; "If the grass grows in Janveer, it grows the worse for't all the year"; "A cold April the barn will fill"; "When April blows his horn, it's good for hay and corn"; "April and May are the keys of the year"; "A shower in July, when the corn begins to fill, is worth a plough of oxen to all belongs theretill"; "If the first of July be rainy weather, it will rain, more or less, for four weeks together."

One is reminded of St. Swithin's Day which falls on the fifteenth of July. If that day be rainy, for forty days we shall see the rain fall. With these two blighting prophecies before us, it would seem well to avoid even the appearance of rain in the month of July. In addition to this, we are not to forget the twenty-fifth of July, the beginning

of the Dog Days, when for a month it will be muggy and sultry.

Again: "If the twenty-fourth of August be fair and clear, then hope for a prosperous autumn

that year."

The old willow calendar used to come in handy, also, for these four signs, which were precise enough to give the day of the week. "Red at night, any night in the week except Thursday, fair the next day"; "If the sun set in a cloud Thursday night, there will be rain within forty-eight hours"; "If there be a clear sunset on Friday night, there will be rain before Sunday night"; and "The last Friday of the month sets the weather for the next month"—and this in turn reminds us that "the last three days of every month set the weather for the following month."

The spring and fall equinoctials—those three-day rains which were formerly looked upon as inevitable, and which commenced on the twenty-second of March and September, when the center of the sun crossed the celestial equator—told, in their clearing, the weather for the next six months. Were the clearing winds fresh and cold at the close of the spring equinoctial, there might easily be frosts every month to blight the shivering gardens—but, if the air cleared warm, look out for withering heat until late September. So, according to the season, was it also with the fall "line storm."

Then there was, and still is, the "weather breeder," one of those rare and lovely days, when the air is clear, the sky intensely blue and all innocent of clouds. Now the farmer knows that a storm is brewing and that a gentle, seductive Today will be followed by a termagant To-morrow.

Lovely in their radiance and rainbow shades are the sundogs—infrequent and awesome—and when they had planted themselves in sentinel-like precision at each side of their god, man knew that a heavy storm was approaching and probably dire disaster, besides. The season made no difference to these little sun-worshippers, for when they were moved to their visitations, they came, were it Squaw Winter, Indian Summer, torrid heat, or frigid cold.

Finally, when one has absorbed all the weather lore of one district of our country, he has but put himself in form for learning that which will greet him at his next stopping place. And, if we are growing a bit sceptical at the credulity of our forefathers, it may be well to remember that these accumulations of weather lore have been garnered for many generations; and that it is therefore safe to assume that, had they not proved their worth in the long run, they would not have outlived their garnerers.

## XIV: The Spinning and the Spun

If you a good spinner would be, Bring your hand to the axel-tree.

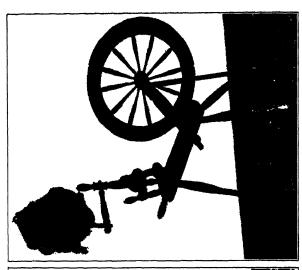
Long ago, in the isolated hills of New Hampshire, a little girl used to hear her grandmother say this couplet over and over again, as she taught her how to spin on the great wool wheel. That little girl is now an elderly woman, still living in her great, great grandfather's homestead, but she has never forgotten the lessons, nor the lines.

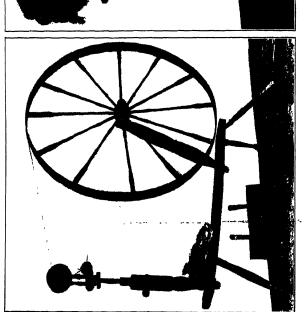
None but those who learned to spin in the long ago can tell how important it was that this special precept should be "minded," as the great wheel went its round and back again. It is undoubtedly not alone to the straight-back chair, that our grandmothers owed their erect figures, but quite as much to the fact that they were spinners, one and all, and learned early that, to spin well, they must be mindful of how they stood, and how they stepped, and of the freedom of their arms.

Learning to spin on a wool wheel is a pastime different from any other in the world. In the eerie rhythm of the spinning yarn, in the hands of one who knows the work, other sounds drop away; and, under its spell, there is but one desire in the heart of the beginner—that she herself may give that magic touch to the great wheel, experience the pull of the spindle and the lengthening and strengthening yarn, and feel that wind-woven humming under her own hands. She takes her place beside the wheel, and when it has responded to her timid touch, all of her attention is suddenly centered upon the point of the spindle. Watching it closely, she draws nearer and nearer, until upon her shoulder comes a little tap and a voice sounds at her ear, "Remember, my dear, if you a good spinner would be, bring your hand to the axletree." Ah, the little couplet, which brings you back with a long pull of the roll each time to the axle-tree, until, of course, the spindle point draws once more and you must be told the couplet all over again. Freedom and grace of motion, a long pull, a light touch and always the three little steps, which may not be shortened to two.

Another New England woman remembers her spinning lessons, given by her mother-in-law shortly after her honeymoon of a day was over. There was no couplet, but many patient and loving instructions, followed earnestly—though alas, to her chagrin, she was never allowed to spin the worsted for a dress!

"I did want to learn how to spin, so I could do my share and please William—you see we never spun at home. I tried oncommon hard and, after a spell, Mother said my yarn was good





WOOL WHEEL AND FLAX WHEEL (Left): Note wool cards beneath wheel

enough for 'feeting.'" She smiled at the remembrance, probably of William's praise. "Then I did a little better and Mother said I could spin for blankets. But, you see, I had lotted on making myself a dress and Mother always said it would n't be good enough. I cal'late I was some stupid." Now she laughed, a bit deprecatingly. "But this underskirt was made from one of mother's homespun dresses, with the brown blocks and green crossbars." She lifted her gingham dress, exposing a bit of her ankle and the old homespun goods, warm, strong, showing its hand-carded threads, as crisp and vital as feathers picked from a live goose.

So little time has really passed since spinning days, that some of us have been able to get from the lips of the spinners themselves these precious bits of memory, recalling the spinning-wheel standing by the warm chimney place, or the kitchen stove, and all that went on around it and the spinner. And yet, one must have a generous amount of imagination to visualize the life of our grandmothers, their needs and their limited resources. It is difficult to remember, for instance, that if a bundle were to be fastened—wool for the carding mill, or one of neater form, which carried a change of dress for a visiting maiden—it must be pinned with a thorn from a thorn tree, stuck together with gum from another tree, or tied with a string which had first been spun by hand.

It would be impossible to enumerate the things for which the spinning-wheel was pressed into service. Most of the wearing apparel, all of the bedding—except the straw, husks and feathers in the ticks—all of the window and bed hangings, some of the rugs, much of the house- and farming-equipment, passed first, in the form of a slender thread, over the tiny spindle of the spinning-wheel.

Twines of all kinds were coarse work and the children learned their spinning in the manufacture of them. "Harness twine," for use on the great hand-looms was of a finer quality, while twine of a rope-like texture, which could be used for actual harness purposes, was naturally of a much heavier quality. The spinning-wheel itself could not be set in motion, until it had had spun for it a band of twisted wool, fourstrong, which should connect the great wheel with the head-so an old spinner tells us. Yarn was spun forever, we might say, for socks or "feeting," and the little girl, who learned her spinning to the song of the old couplet, spun the yarn for her husband's socks until 1918 and is still knitting them, although the yarn now comes from "off."

For flax, hemp, silk, cotton and the lighter materials, there was a low wheel, at which the housewife sat, when spinning. This was quite different from the wool wheel, which was about twice the size of the flax wheel and at which the spinner stood for her work. Since the growing of flax was undertaken early by our pioneer fore-fathers, the flax wheel came into use almost at once in this country. Flax wheels were always of the daintiest workmanship. The wheels themselves were turned out with the greatest care and the frames were of such well seasoned and beautiful woods, that we almost never find a flax wheel which is not a credit to the old wheelwright who made it. A rarer type of flax wheel is that with two spindles, but, while this increased production, it did not compare in beauty of line with the older, single-spindle type, for it has not the free, graceful lines of the latter.

As you seat yourself beside a flax wheel, you have the feeling that it is going to spring into sudden activity, so lightly does it rest upon the floor. Even the solid platform and the legs upon which it rests, although in reality the foundation of the whole structure, were not made on the perpendicular, but started life on the forward slant and seem ever to be starting somewhere. The uprights which hold the wheel have a slant of their own. cocking backward as though for a spring in the other direction, but saved from this foolish departure by the rod which is connected with the wheel at the axle and runs below to the treadle, near the floor. At the other end of the platform, the standard arises at a bit of a slant, and now we come to the first perpendicular lines on the whole wheel, where the "bar" meets the "standard" and where the "distaff" mets the bar.

Unlike the rest of this polished and perfectly finished little machine, the distaff is always the ungarnished "last year's growth" of a pine tree, with its horizontal branches gathered together in a group at the top. It is upon this that the flax is placed, when the spinning is to begin. Fastened to the platform with a wooden worm-screw, is the piece which holds the flier; and within the flier, which is well fitted out with teeth, is the spindle. Not, however, until a substantial piece of salt pork rind is firmly fastened under the iron crank, which connects the wheel with the treadle, must there be any spinning, for the crank would soon rub too unkindly upon the passive wood and there would result friction and a song unattuned to the whir of the wheel. With all these finely contrived parts, in central New England around eighteen hundred, a flax wheel could be procured for one dollar.

While all the other parts might be made at home, and often were, the wheel itself generally came from the shop of the wheelwright. Many of us have believed that the early wheelwright's reason-for-being was the manufacture of wheels for wagons and carriages, but this is not the case, since for many, many years there were few wagons and no carriages. In the winter, the wheelwright kept busy, turning out wheels for his spring and

summer trip, when, laden down with his wares, he set forth to peddle these necessary little articles from farm to farm. He traveled on horseback, and the wheels, taken apart, to be "set up" where they were purchased, traveled small and well.

What went on to these classical looking wheels was a truly hand-wrought product, quite as much, as that which came off them, although it is of the latter product that we hear the more often.

Here and there on farms where perhaps the girls of the household raised silkworms and had a modicum of silk with which to work, we know that silk was spun for such delicate things as hair nets for "water-falls," and for the strings of æolian harps, which were placed in the open windows to catch the wandering breezes. One old lady told of her great aunt who, in preparation for marriage, spun her wedding veil from the silk of her own silkworms, and wove a sheer, white web, a yard and a half long. Then, just as the wedding day was almost come, her dear bridegroom died, and the little white veil, which was never to grace a bride's head, was dyed, or rather "colored" a griefstricken black and worn for the remainder of her years by the bereaved little spinner.

Just before the eighteen hundreds came in, some women of Massachusetts managed to spin cotton thread on their flax wheels, but as this commodity was hard to "come by" for many years after, it was not a popular spinning medium.

Of both flax and hemp for spinning, there was an abundance. Flax became linen, fine or coarse, as was desired, while hemp was spun into thread for use in coarse articles only. Even tow, the heavy combings from these two, was spun; and, while it was usually used only for twine, roping, or bagging, it did sometimes rise to the rank of a coarse shirting, which did its wicked best to drive its wearers mad with its scratchings.

Away back somewhere, there was a grave botanical error made, when the male hemp, because of its shorter and weaker fibre, was mistaken for the female and given the name of "femble-hemp," or "fimble-hemp." The "carl-hemp," coarser and stronger, was believed to be the male. At this time both hemps were used. Gradually the fimble hemp monopolized the field—being no lady after all—and having no rival now, the word "hemp" was in some cases dropped and that of "femble" used by itself. In an account of a church-warden, dated 1797, at Wigtoft, Boston, we find his entry: "Paide for femble, and for makyng thar of in bell-ropes, 1s 5d."

Flax was the favorite and the great standby for the small spinning-wheel, for this dainty growth had a feeling of refinement under the fingers, as it passed through them from spindle to bobbin; and when, as linen, it was ready for bleaching, it took on a snowy complexion, which could be procured from no other material. Not just by laying it in the sun, did the women change the yellowish flax into snowdrifts of linen, but by a process of several days—soaking in water, rinsing in the brook "until the brook ran clear," "bucking" in bleached ashes and hot water in the bucking tub, then through a week's rest in more water, and at last to that happiest stage of the process, bleaching in the sun, undisturbed on a patch of sheep-cropped grass. Linen was sometimes bleached in a short-cut way by using slacked lime, or buttermilk.

But we are getting ahead of our story, for the flax had a long and thorough preparation, before it was fit even to approach the spinning-wheel. First it was cut, left to dry for a few days and then "rippled," or drawn through a heavy iron comb, which separated the seeds from the stalk. The stalks were then tied and stood up in stooks for further drying. The leaves must be eliminated, therefore the flax was watered, that they might rot off. Sometimes this was accomplished by placing layers of the plant in a "steep-pool," or by the easier, but slower way of exposure to the weather, which was called "dew-retting."

The flax was now ready for the "flax-brake," a great clumsy log contrivance, manipulated by man power, so that the stalk was broken enough to separate the fibres of the plant from the hard woody center. This did not remove all the particles of bark, and the "swingling block" and the

"swingling knife" of wood were next used. Bundles of flax tied together after this treatment were called "strikes"; and from the residue, called "swingle-tree hurds," a rough kind of bagging was made, and twine for tying grain bags. Sometimes, not yet satisfied, the farmer would take one of his great wooden troughs, put in the strikes, and with a huge wooden pestle, pound them, until they were really soft.

Here and there, scattered among odds and ends of old farm relics, it is not unusual to come across a hard-wood board, measuring about two feet in length, in the center of which rises a square forest of cruel looking iron spikes, from four to five inches long. This is an old hatchel, or hetchel, over which, when it had been fastened to a stationary base, the nearly exhausted flax must travel, before it could assume acquaintance with the spinning-wheel. Here the fibres were separated into small threads, freed from tangles and set apart from the remaining "hards," or tow, which was then relegated to a humble sphere of its own.

When our forefathers cleared the great forested hills and valleys, made them crop-producing and finally turned them over to great flocks of sheep, the work of the wheelwright increased, as the wool wheel became a necessity in every home. It is interesting to note that, in those sections where linen was generally used, the flax wheel is spoken of as "the spinning-wheel" and the wool wheel is specially designated as such; while, in the wool-bearing districts and in those sections where flax was not so generally grown, the wool wheel is spoken of as "the spinning-wheel," while the flax wheel is always specified.

Even to-day, in the old barns of Vermont, New Hampshire and other New England states, or perhaps in the wagon houses, there stand great wool chests, measuring from six to ten feet long, and made of boards averaging twenty-eight inches in breadth and hewn solid from the first-growth trees of the vicinity. To-day, if one is allowed to raise the hinged cover and look within, one sees bushels of cleanly threshed oats stored away for feed, and down among the grains will probably lie buried the winter's supply of frozen meats. Long ago when these chests were built, there was some other place for oats and meat and, within their spacious insides, fleece upon fleece lay folded in square bundles, firmly tied with wool twine, keeping cold and protected, until they should come forth for home carding, or a trip to the nearest carding mill, as the case might be.

Both black and white fleeces were often raised on the same farm, in order that the good "sheepgray" cloth of their intermingling shades might be easily had, without artificial coloring. To-day we would call this cloth "pepper and salt."

It was a strange sight, when first the sheep were

turned out of their folds in the spring, to see them scurrying along the road to their pasture lands, with great rags of wool hanging from their legs and backs, silent appeal to the shearer to come with his shears as soon as the sun was high enough. Sheep were not sheared in the cold weather, except under extraordinary circumstances. There are stories of Revolutionary days about soldiers on short leave from the army, who went home ragged in cold weather and, before they returned, were refitted with warm clothes, these gifts coming from the back of some patriotic sheep, which had been caught and sheared, in spite of the freezing temperature. And, while the master was being tailored, the sheep found himself also outfitted with a new coat of braided straw, or husks.

One way in which wool had a decided advantage over flax, was in its quick adaptability to use. Once the wool was sheared, it was ready—after washing—for the carding; and, once carded, could be spun immediately. If, however, the yarn were to be used for some choice purpose, such as a gay bed quilt, or a dress, or blanket, it was "dyed in the wool"—and this was done, either in the everready indigo dye pot with its strong smelling, but gorgeous, blue shades; or it was boiled in one of the home-made dyes, which the women had discovered for themselves.

One implement which sometimes suffers from mistaken identity is the wool-card. This is often

believed to be a curry-comb and associated with Dobbin. Here and there these old wool-cards turn up, and they are generally well grooved, or greased, by finger use and pressure, the right card being easily distinguished from the left by these markings. Cards were always made and used in pairs, for one without the other was quite useless, the action of teeth on teeth being the process which combed the wool smooth and finally made it into rolls for spinning.

These cards were made prior to the seventeen eighties, by hand, each little wire tooth being cut and inserted and clinched in separate holes, which had been hand punched with an awl in the leather backing. Later, when two machines were invented, one for cutting and bending the wires, and the other for piercing the holes, home manufacture was largely abandoned.

It was shortly after the seventeen hundreds that carding mills came into existence. The young women of the country welcomed these mills, not so much because they took the task of carding off of their hands, as because they offered a new reason for trips away from the farm. One can see these girls in imagination, horseback, traveling home from the mill with great bundles of newly carded wool fastened behind their saddles. Being used to carrying almost any shaped bundle on the horses, the mountains of wool, tied up in sheeting, seem not to have bothered them in the least.

While all girls knew how to card, the work was of a nature which allowed the grandmothers of the families to do their share without too great strain. Grandmothers have always loved to sit by a warm fire, and it was necessary that the carder be near a fire, in order that the right card should be always well warmed. So she was able to "sit by the fire and-card," holding the left card with the handle away from her and teeth in front. Over these teeth was spread a small quantity of raw wool, which had generally been well rubbed with "swine's grease." This she "tummed," or brushed with the right hand card, until all the fibres were lying straight from side to side; and then with a light quick touch of card on card, these strands were made into the fleeciest of fleecy rolls. As soon as they were done, they were ready for the spinning wheel.

The best twisted worsted was made from wool that had never touched the cards, but had been combed with wool combs. These implements were much more clumsy than the wool cards but, with their long steel teeth, measuring from twelve to seventeen, or eighteen, inches inserted perpendicularly to the club handle, they laid the soft fibres in order for the hard twisting.

One old lady, who has but lately left her home on the hills, recalled a short time before her going, the steps which had to be taken, before she, or her sisters, might have a new dress for Meeting —or rather, the yarn to weave into the goods for a dress to wear to Meeting.

"Well, first," she said, in describing this "House that Jack Built" process, and smiling indulgently at the ignorance of her interrogator, "the wool was on the sheep. Then my father drove the whole flock to the 'sheep place' in the field, where there was a dam and a pool of water. The sheep were driven in, one by one, and he and his helpers washed them-a thorough washing. And then they were left to dry in the air and sun. Then he sheared them. I was always afraid he'd cut them, he worked so fast. But Uncle Ab was faster, he and his cousin sheared a hundred and one sheep in a day. I did like to see the great fleeces slip off, though, and see them thrown aside to be bundled up. It was quiet work—the shearers could n't talk much, except to quiet the sheep—there were so many hard places that needed attention.

"Then the wool was picked over, before it was washed the second time—the women did it, opened and picked it over, took off the tarry brandings, and washed it the second time in tubs. This time it was dried on sheets laid out on the ground—this got the natural oil out. When it was thoroughly dry, they picked it and pulled it, to get out the dust. Then, in my day, it was sent to a carding mill, but in my grandmother's time ladies did their own carding with hand carders, and made the carded wool into rolls."

The original rolls, which were turned out from these ancient cards, were long and light, about a half an inch in thickness and of an evenness which is intriguing.

"And then." continues the old lady, with a glint of anticipation in her eyes, "then came the

spinning."

So familiar was the motion to her old body that, unconsciously, she raised her hands from her chair arms, where they had been resting; and, with the index finger on her right hand revolving, as it would have done to keep the old wheel in motion, and moving her left hand back and forth in an oblique line, she closed her eyes and seemed to hear again that familiar humming song.

She opened her eyes "—and then the wool was spun. Then Mother wound it on the reel nearby and doubled it back on the spinning-wheel for twisting. This made it twice as strong. On the reel again it was measured off into knots, always forty threads in a knot, remember. You put a thread through this many, to hold it. We called it about six of these knots made a skein—others called it different numbers sometimes.

"Take it off now and wash it again. Then color it—that is, sobeit you wanted it colored. Then wash it again. Now for the swifts. And from the swifts it will be wound on the quills—and now it is ready for the loom."

This was Grandma's picture, as she looked back

into the past; and yet those of us, who were not there, can see other pictures, to which she was too accustomed to pay attention—the glints and shadows of the kitchen itself and the silhouette of spinner and wheel against the high chimney place, for both must be kept warm to accomplish good work. We hear sounds, also—sounds which the old spinner could doubtless hear, but did not mention—the loud ticking of the clock; the spasmodic ticking of the clock reel, as it wound off its knots; and, in the corner, the spring water running into the open barrel.

The spinner of wool always stood at her task, as we have said, and stepped back and forth three steps each way, as she alternately drew the roll from the spindle point and reversed to wind the thread on the spindle, or spool, again. Some women could not spin without a wooden "finger," a dainty little piece of turned wood, like a tiny banister slat, with a groove near the end, deep enough to catch in the spokes of the wheel as it revolved. The grooves in well worn "fingers" are often very deep. Other women again could not use a "finger," but turned the wheel with a touch of their own fingers. These "fingers" to-day are often mistaken for toddy sticks, although the latter were much longer as a rule. The band which passed over the large wheel was generally woven on the wheel itself.

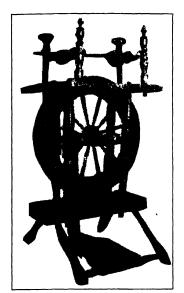
"I always made my own wheel bands. I like

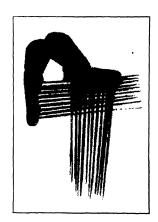
them twisted just so, four strong, from wool," one old spinner, still living, says. "I made a loop in one end, and into this slipped the other end. Then I laid the straight end back and bound it flat with a linen thread, so it would go as smooth as if it was greased, and I'd never feel a hump as the wheel went round."

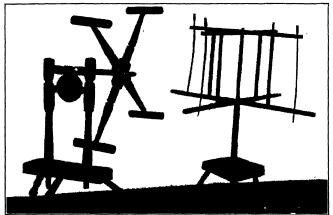
The bands on some of the old flax wheels are of linen whipcord, so intricately woven that the joining cannot be found.

The head of the wheel was put together with such materials as leather, horn and bone; and sometimes the spindle was bound on with braided corn husks. The platform of a wool wheel was often made of oak; the spokes and uprights and axle of hickory, or ash; while basswood and boxwood were often employed in other places. The spindle was of iron, about a quarter of an inch thick and running down to a point, where the wool was drawn off. In 1800 a splendid wool wheel could be bought for two dollars.

The very earliest spinning-wheel was the hand distaff, sometimes in colonial days called a "rack." The "improved spinning-wheel," as it was called, came into existence just before spinning started on its decline, and by many was not considered an improvement after all. It had a long arm, to which was attached a spindle; and this swung back and forth within reach of the spinner, who was seated and used a treadle, as did the flax spinner. It was







IMPLEMENTS FOR SPINNING
Unusual flax wheel; two wool combs; two types of reel

ungainly in line and form, when compared with the old style and, so far as is known, did not gain much popularity.

Much has been told of the old-time spinningwheels, but always, along with the spinning-wheel went the reel, like a mare and her foal, and of the reel we have heard little. Close by the fire, keeping warm along with the wheel, so that its clock-heart would work smoothly and without friction, the little reel was within easy reach of the spinner. This proximity facilitated the quick winding of the newly spun yarn from the spindle into skein form. Reels were of many forms but, in height, were uniformly made to be used by a person seated, if it were so desired. The clock reel is the one which ranks highest. It is made on a long, slender platform with four turned feet; has a wooden upright, to the front of which is fastened an odd, scrolled box; and within the box the "clock" is hidden away. To the front of the box is affixed a rimless wheel of, generally, six spokes -measuring two yards in circumference and turned by hand.

Long and careful whittling alone brought the workings of the clock into existence. There are two sturdy wooden worm screws—not turned, but whittled—and two wooden wheels, edged with cogs. Cogs and screws work upon each other, until they have revolved forty times, and then comes the "snap" of a fine piece of ash, against a long

hand-wrought nail, to tell the spinner that she has wound a "knot" and must fasten it. "Tie a knot at the clock," before going on for the rest of the skein. Forty threads, and forty only made a "knot," and these were tied together with a little piece of wool yarn, and knotted. While the reel has been making its revolutions, a heavy metal finger has been going the rounds of the clock face, which is a couple of concentric circles, scratched in the front of the box below the axle and marked at the ten minute points with deep punches in the wood. The ends of the reel spokes carry each a perpendicular piece of wood about six inches long, over which the wool is wound, the end of one of these being left smooth, so that the wool may be slipped off. Thus a skein was a "slipping." In one of the spokes is a tiny handle for turning.

Some reels are nothing but a chunk, or knot, of white pine, flattened on the bottom, with a slender upright fitted into the top. Around this upright is arranged a circular series of radiating rods, or "blades," and—so that it turned easily—the spinner managed to wind her homespun and achieve the required "knot." Other reels are fashioned in form like a clock reel, but have no clock within. There was also a triple reel, a lighter affair which rested on a table and was capable of winding three knots at the same time. These were not very common.

Some spinners had little holes in the spokes of

their wool wheels, into which they set pegs, when they wished to shorten the circumference of the wheel and make it into a measuring reel.

The "niddy noddy" is the simplest of all the old reels. It is a little hand machine, a slender ash rod, to the ends of which are fastened perpendicularly, but in opposite directions, two other rods. It was these end pieces that the wool was wound, by a dexterous twisting motion, which took the whole arm and plenty of elbow room for its performance.

Niddy noddy, niddy noddy, Two heads and one body.

It was thus the simplest member of this famous family of reels, which won commemoration in verse.

Although really belonging among the reels, the "swifts" stands rather by itself. This is a fairylike arrangement of slender slats, so tied together at the ends, and so revolving in its socket, that, by pushing up and down, it can be made to hold any sized skein. It was occasionally set in a block on the floor, but nearly always used on the edge of a table, fastened there with a wooden clamp. John Alden was supposed to have been pressed into service to hold Priscilla's yarn, when she wanted to wind it into balls. Had she been supplied with a "swifts," John might have been spared this task, but—he might also have lost Priscilla, for pro-

pinquity has always been called the greatest of match-makers. The "swifts" was also used for holding the warp, when it was being wound onto spools, and the woof, or weft, onto quills for the loom.

Although spinning was the "all-the-time" task of the women, it was by no means the only one, and the amount of work which was done at the old spinning-wheels—in addition to all the other strenuous tasks in a day's work—is certainly amazing. Two skeins of linen thread were considered a good day's work; and this meant the spinning of about one third of a pound of flax, for there were five, or six, skeins to every pound. A skein, or "slipping," was made up of twenty "lays," a word sometimes used where linen was referred to, in the place of "knot."

If the spinner happened to be one of those women who traveled about from house to house to help with the spinning, she received for this amount of work, eight cents a day and her "keep." Although the materials were so different, the amount of spun linen and wool, which were called "a good day's work," were practically the same.

"Forty knots spun and wound in one day was considered always a good day's work," says the old lady, with whom this chapter begins, "and yet, when Mother was sixteen years old, she spun a hundred knots in one day; and Aunt Sapphira did the same at that age." Each girl strove to prove

her skill and make her record, for spinning was one of the prized accomplishments of a would-be bride.

The difference in the size of the old skeins, some being made of so few as four knots and some with as many as seven, varied according to the use to which the homespun was to be put. The same spinner says, "There are four knots to a sock, or skein, and eight knots to a pair of socks." Here is one explanation of the variation in size of the skeins, and surely our authority ought to know, for she knitted a pair of socks before she was five years old, and has knitted many a sock and mitten right on down the years, once making a record of five blue and white striped mittens, man size, in one day.

It matters little just how many knots went into a skein, but it has mattered a great deal that so many skeins, of one sort or another were spun, throughout the first two hundred and fifty years of America's life. The courage and perseverance for which all this spinning stood, should mean most of all to us who are carrying on.

And last but not least, we must remember that "a good day's work" at the wheel meant walking twenty miles, back and forth, back and forth, on the dirt sanded, or clay-painted floor.

## XV: Quilling Wheel and Loom

"Weaver Gabriel Harris" was an artisan of the loom and dwelt in his hamlet by the sea in the respect of all men, leaving "four looms and tackling, and a silk loom," when he passed away. Gabriel was but one of many of the old-time weavers, who were allotted a high standing in their communities because of their "substantial characters" and their choice of occupation, their art and their industry.

Although we have come to believe that most of the early weaving and cloth-making was done at home, the business of weaving in a public capacity was established among our earliest industries. There was no machinery for this weaving, different from that which was in the homes, and it was all hand work, but skilled weavers early built their great looms in their front rooms and hung out their signs; and this was done as soon as a settlement became of a promising size. Shortly after the seventeenth century had passed its meridian, families had "yarne at the weaver's" or "a piece of cloath at Weavers and one at home," showing that there was enough weaving to be done, to keep the home looms busy and the weaver's loom, as well. The work was charged for by the yard, and the prices varied, according to the number of warp threads which the web contained.

Weavers also went from house to house as "journeyman" weavers, staying by the week, sleeping on the "third best" feather-beds, and receiving fifty cents a week and their "keep," as wages. This was the usual wage before the Revolutionary War. "Weaver" came when outside help was needed—this was usually after a long period of steady spinning—and it was his stint to put into webbing all that the spinning-wheels had produced. These lengths of webbing were then turned into sheets, dresses, slips, hats, gloves, trousers and whatever else the family needed.

In spite of the large home consumption, there was often enough cloth left over, after these weaving orgies, so that the housewife had some currency for barter. The cross-roads store was the usual depot for this sort of trading and its proprietor would allow forty-two cents a yard for linen webbing. Real homespun linen, woven from flax which had taken a year and a quarter for the planting, tending, breaking, hetcheling, swingling, spinning, weaving and bleaching—all this was procurable for this modest sum.

One of the most enticing parts of the old homesteads of America is that which lies back of the two finished bedchambers on the second floor, or over the ell. It was often left with its woodwork unfinished, or rather with no woodwork, sometimes because the money was not to be found for the finishing, sometimes because the room was not required, even for the needs of a large family, but was set apart for the weaver and the loom. There are various names for this most interesting room: it is the "corn chamber" in some homes; the "pelt room," the "open chamber," or the "loom room" in others. Whatever name it bore, such a room was nearly always graced with a great hand-hewn loom.

The ancient large looms have nearly all passed, but the few that survive stand as firmly on their feet, as they did two hundred years ago; and, built of the same massive timbers as the houses that shelter them, it is not strange that it should be so. In size and shape, they are like the great four-poster beds, with "warp" or "yarn beams" for the foot boards, and "cloth beams" at the heads; but, equipped both high and low with heavy tackling, they give the impression of greater size. It was not, however, their size, so much as their noise-making capacity, which was the cause of their banishment from the living-room, or kitchen, where so many of the other home industries were carried on. The "thwack, thwack" of the heavy batten, as it monotonously fell in the weaving, could be heard on the road by the passerby.

Seated on his high wooden bench, which is a builded-in part of the loom, like an organist at a great pipe organ, the weaver runs his fingers back and forth with equal skill. The shuttle appears, first on one side and then on the other; the weaver's eyes are steady in their glance, watching the warp, as it plays beneath his fingers, the harnesses, the reeds, the batten, and the finished web. All about him, from shelf and overhanging beam, gay bits of yarn homespun make his background, while the sunshine through the tiny window-panes slants here and there across his growing web, picking out a dainty violet color, which has been dipped in a fleur-de-lis petal wash, or a strip of gorgeous brown, stained with the strength and beauty of the butternut tree.

The loom is not the only adornment of the "open chamber." First of all, the wall claims attention and here—on the great timbers, which have never had to undergo imprisonment behind coverings of board, or lath and plaster, but show oaken pins and joinings—a tin candle-sconce hangs, its reflector fluted by hand, when there was no machinery for fluting. Old iron lamps of the "Betty" type, which burned whale oil, were also attached to the wall of the "open chamber," out of danger's way, and high enough to throw a gleam over the growing web, when the early winter afternoon sunset found the weaver not yet ready to lay down his shuttle. Some of the looms had lanterns fastened directly to their frames.

Near the seat of the weaver, a bobbin-basket is

hung on a peg and into this the empty bobbins, or quills, were tossed; or well-filled bobbins were kept ready for use. These baskets were woven of broad, silky strips of rush, or sweet flag, and stood the strain and weight by reason of their flexibility.

Against one wall the warping bars incline, looking much like an old clothes-horse; and the spooling rack near by, while not beautiful, is at least interesting, with its long rows of pegs, or holders, for the forty spools which must be set upon it, when the warp is to be put in place for a new web.

The little wheel which stands in one corner near the boarded-in staircase, although it looks as though it should be down in the kitchen near the fireplace with the spinning-wheel, is, in reality, not at all for spinning, but rather a quilling wheel. Most of these quilling wheels are ancient, both in looks and reality. The frame is made low, so that the one who is filling the quills from the reel, or "swifts," may sit at work. The wheel itself, in size, is generally a compromise between the large wool wheel and the small flax wheel, but is made with fewer spokes, its revolutions not needing to be as exact as for spinning. Once in a great while an exception is found to the usual simplicity of design of the quilling wheel, and then it is even more elaborately finished than the flax wheel itself. In the rudely whacked-together

box at the end of the quilling wheel, on an iron spindle, revolves the quill which is being wound with the weft—or the spool which is being wound with the warp—for the cloth, or carpet, which is to be woven.

Since the quills, when filled, will be slipped into a shuttle as bobbins, they are necessarily slender little affairs and were made of some pithy wood, generally elderberry, or sumac, from which the center could be pushed easily, leaving a hollow for the spindle to pass through. The spools for the warp were hand-whittled and, for a full sized loom, are about eight inches long. Bunches of unused spools are often found tied together and hanging in some dark, forgotten corner of the old ells, long after the loom has succumbed to the ax.

The old weavers loved their shuttles and apparently found it hard to throw one away, even after the days of usefulness were over, for on beam and between rafters, they still show their heads, beautiful in their curves and high polish, although their iron shoes have failed and their little sides are rubbed through.

Although the old loom room seems already to contain so much, there is often an extra reed, or sley in this corner, some new, or too-old harness in that. Great hand-wrought shears hang from a wooden peg, a broken-toothed temple stands in the window sill, and either a clock reel on its

slender base, or a collapsible swifts, may appear in some other corner. Surely no room could hold more rudely made, but yet delightful implements than an old "loom room."

The looms themselves, although to the uninitiated they may seem cumbersome and full of intricacies, were of the simplest models. Their simplicity of construction is obvious, when we realize that looms made in America in colonial days, and for many years later, were of practically the same design as those made many centuries ago. The loom which the man of the early ages could make for himself would naturally be of that construction which would draw his weft and warp together firmly, with no possible waste of effort, or material. Thus, the great looms of our forefathers were of hewn timbers, struck out with the heavy broadax, mortised together with strong oaken pins, fitted with cogged wheels which had been whittled out, treadles, harnesses, batten and shuttle, and other hand-made devices.

If we were only a bit abler with our imaginations, we might picture the making of one of these household gods. The whole family was pressed into service, for there were parts for young and old to work upon. The mother was not excused, but worked along with the others, one of her tasks being the making of the many harnesses with which the large looms were equipped. The slender wooden frames had the string tied

over them, then the knots were tied, down the center in a long line from end to end, and the tiny "eyes" left, through which the warp was to pass. This string was ordinary "shoemakers' thread" and about two pounds were required to accomplish the work for an ordinary sized loom.

The beautifully formed shuttle was of apple wood, or poplar, the former being preferred, since "apple wood polishes itself with use." Shuttle-making was one of the filling-in jobs for the man, or youth, who was clever with his jackknife. It was done during the long winter evenings, when the family sat around the fireside, all busy at household tasks. These little shuttles were made with two purposes in mind: they must fit the hand in its every curve; and they must be of a shape and smoothness to carry well, as they passed beneath the "tents" or warp, back and forth, back and forth, as is the nature of shuttles-a thousand times to the yard, when broadcloth was in the making. At the ends and along the smooth sides, there were little iron strips, shoes for the many miles of travel which lay before them. These shuttles varied in size according to the size of the loom in which they were to be used, but all had the hollow center with tiny indentations at the ends, into which the weft-carrying quills would fit firmly; and the tiny hole at one side, through which the weft might pass out swiftly, as the shuttle flew back and forth.

In time, shuttles were made by regular shuttlemakers and always, before they went out into the world, they had the maker's initials deeply burned in one end. For smaller looms, the shuttles are much simpler, sometimes only a piece of flat wood, curved in at the ends to hold the weft.

The "temple" is a slender sliding device of wood with teeth inserted in the ends. These teeth were caught into the sides of the web to keep it always the same width.

If there has ever been a lucky number in the businesses of spinning and weaving, it must surely have been the number forty, for we see it appearing in various proceedings and directions. "Forty threads make a knot," in spinning. "Forty full skarne spools make a 'bout'" in preparing for the loom, and "forty warp threads there are to an inch," as they pass through the sley to make the "set of the web."

The great hewn-timber loom of the "open chamber" was not the only loom used by our weaving forebears. There were looms of many sizes and many forms. Much of the linen weaving was done on a smaller loom—as well as some of the dress goods of wool—for the web for toweling, dress goods, handkerchiefs and other narrow articles did not require so broad a set of warping, as did blankets, carpets and bed-quilts. Some

looms are the size of an old slant-top desk, and with their uprights and tackling remind one of a low well-top, where the bucket is drawn up over a roller with a crank and chain.

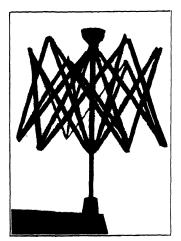
The "braid loom" was a much used article in the old days. A particularly nice one stands about as high as the top of a table. It is equipped with treadles which lie close together and are attached by leather to the shifting parts above. When strung up with its warp and ready for work, the web, about one inch wide, lies at a convenient distance from the hands, so that the tiny shuttle can be passed through the strings with scarcely a bending of the shoulders. Many a yard of braid was woven on this type of loom, when the women of rural New England used to take in "piece work," and weave hats of palm-leaf fibres, shape them, and bind them with hand-woven braid bindings.

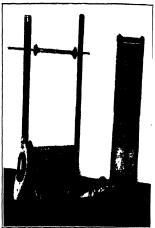
All sorts of box-looms, which could be laid on the table for work at home, or carried conveniently to a neighbor's for an afternoon chat, were contrived and used. Their transportation was surely far less cumbersome than was that of the flax wheels, which sometimes were carried horseback, behind the women's saddles, when on their way to a neighbor's for "a tell."

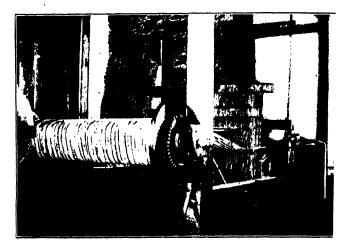
It is hard to believe that women are now living, who still cherish the "first piece of store-made ribbon I ever saw," but so it is and the fact explains why the little braid-looms were so busy and necessary so short a time ago. Unless a girl could weave for herself a bit of bright ferreting-tape for her stays; or an inkle—a narrow band, or fillet, for the hair; or narrow belting for her waist; or tapes for tying her slippers and her gloves, she was likely never to possess these most enticing allurements. It was to the tape-loom that she went for them, working with skillful fingers; and here she went, also, to make her lover a pair of "fair galluses," or garters, if indeed he should need them. Some weavers had a special loom for weaving silk.

Another form of tape, or braid, loom was the single slender board, cut with long slits down the center, and the intervening slats pierced with a hot wire for the tiny hole, through which the warp was to pass. These tiny looms were sometimes whittled at the sides toward the bottom, so that they could be held between the knees. Steadied thus at the bottom, they were fastened to a hook in the wall. These hooks still remain in some old homes, and have been used for various purposes. Sometimes it was the daughter, with her weaving, who "hitched" to it; sometimes it was used by the father in his task of mending harness, or making shoes. Sometimes a handy chair-back took the place of the wall-hook for the weaver and the loom was tied to that.

It would be impossible to speak of all the dif-







THE EQUIPMENT OF THE LOOM ROOM
"Swifts" for winding skeins into balls; single spool-rack,
spools and sley; ancient loom

ferent kinds of hand looms which were used; in fact, we shall probably never know many of the old devices, to which the women turned in accomplishing their weaving problems.

The materials which went into the looms were, of course, only those which came off of the spinning-wheels. Woolen yarns and worsteds, and linen thread were the staples for weaving. Silk sometimes came into the weaver's possession, but rarely, unless the family lived near the coast and was fortunate enough to get some from across the waters. Occasionally the women and girls of a family would raise a few silk worms, as has been said, for the sake of procuring the furbelows which could never come to them otherwise, but this was by no means the rule. Cotton, although later in its arrival for ordinary uses, became one of the weaving stand-bys in the nineteenth century. Hemp and tow were also used for weaving, and while both of these harsh materials were used in making clothing of the coarsest kind, their ordinary uses were for bagging and heavy articles needed about the farm and for the heaviest house work.

An "ell" was a measure of cloth which, although now comparatively unknown, was a familiar term in the seventeen hundreds. It differed in length in different countries, from twenty-seven inches to forty-eight inches, but in America was generally conceded to be about one yard and a quarter. A length of broadcloth was about three yards, and this was the finest piece of cloth which could be woven out of wool. A "web" of cloth was the cloth as it was formed on the loom.

Records have been left, which give us the amount of work which a weaver should turn off in a day, if he would be considered a good workman, and equal to the spinner of the family. "Two double skeins of linen, or four double skeins of tow" (to be spun) "or to weave six yards of linen, is a good day's work." The prices of weaving varied with the kind of web woven and the number of warp threads which it contained. One old Waterbury weaver around the year 1710 was charging one shilling, three pence a yard for plain cloth; for checked shirting one shilling, three pence; and for drugget twelve pence. This last material came cheap, because it was only "a slight kind of woolen stuff."

In 1726 the colony of Massachusetts became concerned, because it was not turning out enough woven materials for its needs. It therefore offered inducements to the weavers, especially for the manufacture of canvas, or duck. These were the requirements to be met, before the inducements should become realities: "It shall be made of good even thread, well drove, of good bright color, being wrought wholly of good strong water-rotted hemp."

One of the crudest articles of dress which was

woven on the loom for the early pioneer, was the hunting shirt of tow, combed from the hemp and woven with wild nettle bark. That it had the durability which was needed in that day goes without saying, but not without a sympathetic cringe, may we think of its devastating effect upon the flesh of the wearer. It was only after repeated washings that these shirts became at all comfortable.

Until about two generations ago the word "frocking" was one of New England's most familiar words, as we have noted in a previous chapter. As far back as the end of the eighteenth century, it was the name given to the woolen goods, which were woven for the making of men's "frocks." These frocks were over-all garments, which the men on the farms and in the country used almost exclusively at their work. They were made exactly like old fashioned, neck-band shirts, at the top; the sleeves were attached to the bottom of long shoulder seams with large, flat pleats and finished with tight bands at the wrist. The frock reached about to the knee and was slit up the sides, for greater freedom in walking and working.

These frocks, universally worn, even by the women in some sections, made up a goodly share of the weaver's work; and were woven of alternate indigo and white wool for the weft, and of tow, or white cotton thread, for the warp. In the sum-

mer, a frock of blue and white checked "drilling" was sometimes substituted. During the days of the Civil War, when the prices of cloth of all kinds soared beyond the reach of country folk, these frocks were worn by many men for both work and "Meeting." In one New England village "Mis' Cap'n Morrison was the prime frock weaver."

There are probably few, if any, persons living. who can remember the loose, flapping trousers which were woven of tow thread and called "skilts." These, like the frontier shirt, were garments of torture, and cried aloud for strenuous washings before they were wearable.

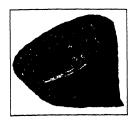
"Linsey-woolsey" was a homespun woven of linen and wool, as the name suggests. This was

generally colored and woven in checks.

By "cloth" was meant what we know as "broadcloth" and this was woven with the yarn, or worsted, which had been spun by the most skilled spinners. There were certain women in the different villages, who stood out from their neighbors as being notably proficient in spinning the material for "cloth." "Clarissa Grimes did the spinning for cloth here in this neighborhood," says one of the few remaining folks of the candleburning days. "She did it as fine as ever so, always."

"Sheep-gray" a serviceable woolen material made of half-white and half-black wool, has been

mentioned in an earlier chapter.





There are many men, and not old men either, living to-day in this country, who never had a "store" suit on their backs, until they were grown men. The spinning, weaving and tailoring of our men-folk's apparel passed out of the homes less than a half century ago. The material of the suits was beyond reproach, but the style may have been questionable, when the wearer appeared in the more crowded centers of fashion. To-day's supply of "store-clothes" for every man has brought inferior goods, but a peace of mind which should probably rank high. When President Madison-whose wife was the last word in elegance of dress—was inaugurated in 1809, his inaugural suit was of fine, rich brown cloth made of wool, carded, spun, colored and woven by a woman living in a country village.

As late as 1814 the only power for manufacturing was hand, or water power, with the exception of one foundry in Baltimore, which was run by steam. Two thirds of all clothing and household linen of the country inhabitants in 1815 was made in the homes.

There is one phase of weaving which stood out by itself for its originality and its beauty, and that was the weaving of the old bed-quilts, which have come down to us in such an excellent state of preservation. Their intricate patterns were accomplished by adding more harnesses to the loom, the resultant "tents" of warp giving the shuttle more chances of traveling by the byways and hedges, a trail always sure to bring delight. Since the colors of these quilts are often as bright as they could possibly be, it is safe to say that they have traveled down through the years without losing any of their original charm.

Blankets of strong, soft wool were made in all homes. Some of these were decorated with borders which suggest the early Grecian; some were made in stripes from top to bottom; and some were made in blocks. Many of these have mellowed with the years, and come down to us softly toned, as they took their original coloring from vegetable and earthy dyes. Blankets of coarse, twisted wool were made for the animals and these, too, have their reminiscent beauty. Bed tickings, hangings, testers and valances all came to grace the bedsteads by way of the family loom, from flax, hemp and cotton. Towels, pillow slips and cheese-cloths were made close, or flimsy, as the needs required.

Carpets were made from long lengths of woolen, or cotton rags, woven on the large loom, breadth after breadth taking form, to be sewed together for a complete floor covering.

From the sheerest bit of linen for the new baby's cap to the clinging shroud, and for the needs which came between, the loom was the genitor, and the presiding spirit of the household.

## XVI: Reverend Clothes—Fulled and Taylored

THE question of dress has forced itself upon man from time immemorial, sometimes from an ornamental angle, sometimes from a protective one. Even in our own country which can boast of so few years, as years run, men and women may be said to have been wresting clothes from nature ever since they landed on these shores.

It was a sorry day for the poor rich immigrants from England to Virginia, when their Englishmade garments commenced to be out at elbow and knee; a sorry plight, too, for the Puritans and Pilgrims, when their plainer and sturdier garments reached stages of dilapidation and disintegration. Had these latter been forced to live even a simpler life than the one they did live, a bear skin would have sufficed, or a wolf pelt; while the group which fell finally to the care of John Smith, might have sewed together the skins of rattlers, or the wings of water fowl and gone happily through their days. Life was complicated, even then, it appears, and cutting, fitting and stitching came crowding in on the pioneer family, just as they crowd in upon us to-day.

It is, nevertheless, a matter of record that the

early settlers used many forms of apparel which had not entered their consciousness when they trod the more conventional highways of old England, though it is unlikely that any of the pioneers adopted the dress of John the Baptist. In time, however, skins entered largely into their wardrobes. Leather breeches-made with the hair still on the pelts and worn sometimes inside and sometimes outside-caps of various undressed leathers, deerskin mittens, and moccasins of fur were common, while coats of fur came into use as early as deft fingers could cut and form them. Many of those who lived in the eastern, or northern, colonies had worn leather garments in the old country and, to them, they were not a hardship; while, to even those gentlemen of the south who had hoped to pick up gold, as they strolled about the country, and were accustomed to lace dangling at their wrists, leather became a very engaging raiment for the rough life in which they finally became involved.

From the Indians, the white man acquired the art of tanning the skins of such game as he procured. In time, the intelligence of the white man outran that of the Indian in this art and, by the introduction of oil in the dressing, the tanning of leather was raised to a higher grade. It was the Indian, however, who could make elk and deer skins into leather "soft and plume, and as white as milk." Occasionally, at an Indian dance to-day,

one may still catch a glimpse of royal garments of this milk-white elk skin, and thus appreciate how great an art these Indian leather workers had evolved with their simple methods.

Early in the seventeenth century leather vests and breeches were worn by the men in the colony later to be known as Pennsylvania, and leather jerkins and petticoats by the women. These skins were Indian dressed. William Penn himself wore leather stockings, or "overalls." Buckskin jackets were a common commodity, not only of the earliest years, but until after the Revolutionary War. Washed, or buffed leather was the kind used most for clothing. The servants of the eighteenth century seem to have been dressed largely in leather, their jackets, breeches and waistcoats being often of leather, or lined with leather, the master and man attiring themselves similarly in many details. Both wore shoes of neat's leather, too, with wooden heels attached.

In spite of this leather vogue, all through these years the spinning-wheels and the looms in the homes of the country were running full time, and often overtime, as we have said before. Most of the materials which were made into clothing among the country dwellers only sixty or seventy years ago, were homespun and home woven, but these durable stuffs were not even yet ready for the needle, and it is at this point that we want to examine and follow them.

The web, after leaving the loom, must go through the process of "fulling." Home woven goods had to be shrunk and thickened, before they were really warm and durable, and this was done at the fulling mill. Even to-day these little old mills may be found, standing on the edge of some water way, their rock foundations still resisting the passing of the water, even though their clapboarded walls are fast succumbing to the passing of the years. In these mills were built the fulling stocks, great troughs for holding water, with heavy oaken hammers hanging from the ceiling above, which reached down into the troughs and pounded the cloth back and forth, or up and down. The water was hot, well soaped, or prepared with fuller's earth—a soft, earthy substance of a light snuff color—which cleaned the woolen web of all its greases and stains, while the hammers beat the woven threads into closer form. the water shrinking them together for greater strength and warmth.

Within two, or three, years of the coming of the Puritans to the Massachusetts Bay Colony, the first gearing for fulling stocks was brought over to this country from England, and for this equipment the tenter posts were made of cedar. There is record, also, of native fulling mills being established in the sixteen fifties and sixties, showing that one of the first industries was that of the fuller.

The work of the fuller was not a sinecure. While the hammer did the heavy work, it was the hands of the fuller, which did the careful preparing of the cloth, before it could be handed over to the hammers. The heavy knots and fuzzes which had survived the wool cards, the spinning and the weaving, had to be carefully picked out with hand tweezers and this must be done without disturbing the smoothness of the web. Then, after the fulling had been finished, the goods must be "dressed." This dressing process was done with the head of the common teasel, and fields of this purply-blue flower were encouraged to grow for the express purpose of supplying the fullers of the countryside. A fire which burned a barn to the ground, only fifty years ago, was considered most disastrous, because it had "taken the teasel fields." With these prickly plants, the nap was raised on the goods, without injuring it. On some farms the fulling was done at home by using the wool cards for the dressing process.

It must be remembered, however, that all wool web was not fulled before using. Many of the finest worsted materials were not fulled and much cloth was worn without shearing, pressing, or other finish.

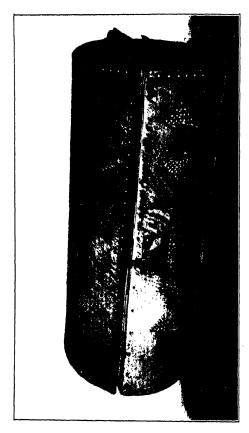
"Just as the "tayloress" became the "shepster" when she cut out the goods, so the fuller now became the "litster," or "lister," if the goods were to be dyed before finishing. The means and

methods of dyeing have been discussed in a previous chapter.

Then came the "tenter hooks," whose use gave rise to the expression so well known to-day to express suspense. Whether the already harshly pummeled cloth felt the suspense, or not, it is certain that it was spread upon this rack to its utmost extremity, its edges caught at even distances over the bent iron nails which held it in place. While it was impossible for the fuller to hand back to the housewife as much material as she had delivered to his hands, he still did his best to keep it from too much shrinking, while it did its final drying—hence the tenter hook stage of preparation. Yard upon yard of woven web would lie upon the grass in the sun, stretched to its utmost limit, before the fuller's mill.

The word "full" is still used by some of the old people, who remember the fulling days, to express "shrinking." One old lady, speaking of a pair of fringed mittens, which were to be made before the last fingers which could make them had grown quiet, said: "You must wash your fringed mittens, oh, so carefully, else they'll full and you won't be able to get them on."

Again, we read of a "fulled cloth vest and jacket," meaning—not shrunken articles, but those made of a cloth well dressed and finished. The expression "full dress" for men's evening



A FUR TRUNK OF DEERSKIN

To be carried in back of buggy. Note initials on top

clothes undoubtedly had its origin from a similar source.

So important was the work of the fuller considered during the Revolutionary war, that one "experienced artificer in making and dressing fuller's shears," was released from the army to follow his trade.

And now, the goods home from the fuller's, came the tailoress with her shears and needle, to do her stint in the progress of the wool from the back of the sheep, to the back of the human. What sturdy, splendid goods those were, which were ready and waiting; well beloved goods, too, for had they not commenced to grow into the affections of the family, when the hired man came into the house, two or three years before, with the announcement that a new little lamb had arrived during the night? Had they not been washed, and combed, and spun and woven right there by the chimney place—perhaps colored, too—in the very heart of the family?

It may have taken nine tailors in the old days to make a man, but it certainly did not require nine tailoresses to make a woman, for the tailoresses of the old days, and until fifty years ago, were generally most capable and of a character to win admiration and respect from their neighbors. Skill in her trade, enduring physical strength and the ability to be a good mixer, all went to

the making of a "tayloress." In 1820, this useful person did her "tayloring" at the homes of her neighbors. There was no sign hanging before a shop door, for work for the home was done in the home, in those days, and it was the apparel of the men which the tailoresses made, not the furbelows of the women.

The coming of the tailoress for a stay of two, or three, weeks meant several important things to a family. Looking ahead, it meant that the men and boys were to have some new Meeting clothes. Looking back, it meant that the spinning-wheel and reels had been turning steadily for many weeks in the hands of the women folks, and that, for many days more, the weaver, or "webster," had been throwing his shuttle back and forth through the great loom, weaving the yarn into webs of cloth and getting it ready for the shears of the "shepster." Not just an unimportant thing in the routine of the days, this coming of the tailoress, but another milestone in the year's progress and activities.

Sometimes the tailoress was a woman who had never married, but made her meagre living by this confining, heavy work. Sometimes she was the mother of little children, who were kept clothed and fed by the income from her constant cutting and stitching. Always, however, she was a neighbor from not many miles "off," who, having traveled about for many years, knew the inside

workings of all the houses in her vicinity, the age of the children, the love affairs of the young folks and the ailments of the old folks, now spending their days sitting near the chimney place. Treated as one of the family, she took her place among them, cutting, measuring, stitching and pressing her days away, humble but strong, dependent but dependable. To be sure, when night came, her lot was to sleep on the "third best" feather-bed, but, when so much time was put into the making and freshening and airing of feather-beds, even the third best was pretty sure to be sinkingly comfortable.

The shears, which were used for tailoring, were great heavy home-made ones, the rivet which held the two blades together, projecting sometimes a half inch beyond them on one side. In 1736 an advertisement appeared in Philadelphia for "clothiers' shears with good iron screws."

One of the home-made products was the "press board," a slender ironing boards, made of a kind of wood, now forgotten, which made unnecessary the dampening of the goods which were to be pressed. It automatically "damped cloth," as soon as the heat was applied. This heat was applied, incidentally, by means of the "tailor's goose," a heavy flatiron, weighing thirteen, or more, pounds, long and slender, and made for the pressing of seams, rather than the whole goods. These irons being made by the local blacksmith, were

almost always of an intriguing design, the handles wrought with many turns, or made with interesting angles.

"How can I say that I have now two tailor's gooses—surely it isn't necessary to say 'geese'?"

was asked of an old lady.

Without a smile came the answer, "You had better say one tailor's goose and then another one."

The "tailor's spade" was an actual little iron spade with a straight sharp end, just the right length for the proper man-button-hole, and with a wooden handle for pounding upon. With this, the tailoress cut her button-holes with short, quick strokes of a hammer. The early thimbles were generally open at the top, leaving the finger end exposed to the assault of the needle, when it felt in a riotous mood.

Since a sewing machine was not even dreamed of, in the old days, all of the stitching was done by hand. Heavy linen thread was spun on the small wheel by the hearth, at the same time that the wool wheel was turning out its contribution to the new Meeting suit; and, when the two came together under the needle of the tailoress, they were an enduring combination, which would last for many years, although sentenced to hard labor.

Although country living was more general than urban living, there were many who did not live on farms, even in the days of our forefathers, and these had to be equipped with clothes, in spite of the fact that they neither spun, nor gathered into barns. Accordingly young men and women in the towns were trained to take care of this demand, and the process of cutting, making and pressing man-shaped clothes in a shop was called in some sections of New England, "whipping the cat." When these young tailors and tailoresses became trained workers, they found their way often to the farms for the fortnight visitations, and other young people took their turn at "whipping the cat." As a matter of fact, however, there were many more women, than men, who went out a-tailoring.

The kinds of homespun materials, which were cut out for clothing by the old clumsy shears were many, as will appear in taking a long look across the years from the days of the early sixteen hundreds, down to the days of "store-made" clothes. It was only twenty years after the Pilgrims landed on their rock-bound coast, that linens, fustians and dimities were being turned over to the tailoress. Linens need no introduction, but fustian was a light goods, made sometimes entirely of tow, sometimes with the warp of flax, or the woof of cotton; dimity was "a kind of ribbed cloth." which fits rather well with our present day thought of it. By 1649 "tuftaffetaers" and "velures" were mentioned, also "glovee" for winter wear. Before the century had run out, there was broadcloth, made of an "even wool," and "two slight kinds of woolen stuff," druggets and shallons. Serge there was and kersey, "a coarse stuff," and other materials, whose content is entirely unknown to us to-day. In the colonies lying to the south, there was a coarse material called "crocus."

Women's clothes were generally fashioned by a "semptress," or by a woman of the family, and they were also made of homespun. Women of means, however, did much of their buying from across the waters, the orders going always in their husband's handwriting and through his male agents. In 1738 an order was sent to London by a Virginia husband, who desired the best for his wife and wished her dressed in taste proper to her advanced years. The order called for a "suite of plain grave Lutestring for a woman of forty years." Whether the shears were applied in the old world, or the new, we can well imagine the respect with which the cutter performed her task, having well in mind the great age of the prospective wearer.

Benjamin Franklin was another husband who did the family shopping and saw to it that his wife was dressed in the prevailing mode. In 1750 he bought her a "brocade print" with a dark ground, on which glowed large red roses and yellow flowers, well intermixed with "blue color" and with many green leaves. For all its elegance of name, it was but printed cotton. In 1758, al-

though in England and far away from the domestic atmosphere, he still remembered that there was a wife across the seas, who should have one of the "newest inventions" in dress materials and accordingly sent her a printed calico.

Running quickly through some of the cloths which were being worn about 1820, we come across such names as the following: "black and colored synchaws," "sarsuetts," "stean-loom shirtings," "pelise cloths," "cassimeres," "tabby velvets," "bombazine," "baizes," "bombazetts."

When it came time for the tailoress to sew the buttons on her variously fashioned garments, we find that they, too, covered a field of ingenuity. In 1695 the best buttons were those made of "metal with a metal eye," those made of "wooden molds with catgut loops" not being considered satisfactory. Probably to-day the wooden buttons with their tough gut loops would have sufficed nicely, but buttons did not roll out from machinery in those days and a button was required to have a staying quality beyond that of wood and leather. In 1719 there were buttons of glass, brass, tin and pewter, a great advance over the buttons, hand-wrought, of bone, or stone, of the earlier years.

When the Revolutionary days came along, there were lead buttons; and many a patriot cut the buttons from his clothes to have them melted into bullets.

In 1817 buttons were also made of molds covered with human, or animal, hair, woven into a covering web. These were called "hair sieve" buttons. In the same year, the tailoresses had access to white and yellow metal buttons for coats and waistcoats, and these were often "gilt plaited." The buttons used on the old fashioned "barn door" pantaloons were of heavy white bone, handcut and punctured with a sharp instrument, to make the necessary four holes.

The tailoresses of a century earlier found clasps and buckles available and therefore used them, not only at the knee for drawing the breeches

tight, but also at the neck.

In the line of progress, one would suppose that buttons would follow pins but this was not the case, for America was well on in the nineteenth century, before pins were common enough to be used by every one; and, within the memory of a man still living, the women of his family took a few stitches in their shawls when they "drove out" for long distances, pins being beyond their by-no-means-stinted purse.

If one can catch the spirit of the old days and the backgrounds which set them off, it becomes an interesting game to follow a single wool fleece, from the back of a pasturing sheep to the back of a colonial pastor, let us say, preaching to his flock. By short steps and easy, such as the sheep itself would take, we will feel our way: First, catch the sheep and wash it in the brook.

Dry and shear.

Wash wool again and dry on a sheet in the sun.

Card wool into rolls.

Spin rolls into yarn on spinning-wheel.

Reel yarn into skeins on clock reel.

Wash wool again.

Dye or "color" in brass kettle with field-sorrel leaves.

Dry and air.

Boil again with copperas and logwood.

Place wool on swifts and wind onto quills with the quillwheel—this for the weft.

Place more wool on the swifts, or reel, and wind onto spools on quilling wheel—this for the warp.

Place forty spools of warp on spooling rack.

Take ends of wool from each spool and wind onto warping bars.

Take from warping bars and fasten to warp or yarn beam of the loom.

Draw the warp forward through each eye of the harnesses.

Pass warp between the reeds of the sley, and tie.

Place filled quills in the shuttles.

Place temple on the warp.

Press one treadle of the loom with the foot.

Throw the shuttle through from side to side beneath the tents of the warp.

Bang down the batten.

Press the other treadle, and throw shuttle through the next tent of warp.

Bang the batten down.

After a few inches of weaving, place the temple forward,

wind up the cloth and release more warp from the yarn beam.

Then back to treadling, shuttling and battening, until the web of cloth is finished.

Place in the fulling trough with fuller's earth and warm water, and hammer with the fulling stock.

Stretch on tenter hooks to dry in form.

Press with a tailor's goose on a "natural damp" pressing board without a cover.

Cut out the cloth with hand-wrought shears.

Sew seams with homespun thread, waxed with homemade beeswax.

Behold, the preacher in his new Meeting coat!

It goes without saying that the stock at the Preacher's throat was of purest white linen, woven on a small linen loom by his wife, and watered and bleached, watered and bleached again through many weeks by that same industrious helpmeet.

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